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THE ARTS IN AMERICAN EDUCATION

JAMES L. MURSELL

In the Educational Forum

THE proper place and treatment of the arts in education obviously depends on their setting in the social order. Now it is abundantly plain that they are playing a spectacularly expanding part in American life. One is impressed by the enormous interest in music both popular and "classical," in the whole range of pictorial art all the way from gallery exhibitions to commercial advertising and magazine illustrating, in the vast expanse of the so-called applied arts, extending from architecture and community planning and beautification to costume and commercial design, in the dance in its various forms, and in the drama as manifested both in the cinema and the legitimate theater. There is no doubt at all that the American people's consumption of art is rapidly expanding in quantity and gaining in quality.

The general lesson of all this for education is clear enough. The arts have a vital place in preparing our children for the sort of lives they are going to live. They must have a position of high importance in a curriculum which is responsive to the realities of social and cultural evolution. They definitely belong in the ambit of what is called general education.

But this certainly involves a revolution in their pedagogical treatment. Hitherto education in the arts has been almost entirely planned for the specialist and the professional, and the person with only a general or amateur interest was supposed to nourish himself with whatever crumbs he could get from the table of the prospective virtuoso. Now it is exceedingly clear that our schools ought not to go into the business of turning out bad painters, feeble virtuosi, and blundering dancers and actors. They should just precisely not duplicate in a weaker medium and with lower standards the work of our conservatories of music, art schools, and dance academies.

What should a proper program of education in the arts for the general student seek to accomplish? We can get an answer if we look a little more closely at the social need which such work must serve. It is not so much with the arts as such that the average citizen is concerned in his daily doings. Rather it is *beauty* with which he is concerned, beauty in tone, in visual arrangements, in

words, in images, in bodily movement, in sequences and patterns of ideas, beauty in his home, his community, his work-place, his recreations. What he needs is not so much to become an amateur of this or that art, but an amateur of beauty. Here is our educational clue. The clear implication is to think and plan in terms of a broad, unified segment of human education which, to use a German term which has never achieved popularity in this country, may be called *aesthetic education* — whose central purpose is to promote responsiveness to the manifold aesthetic values and manifestations which our civilization is throwing into such high relief.

How can this idea be worked out in an actual situation? Let us suppose that all the arts interests in a school or school system agree that they have a common task, and propose to realize it in an operating program. The workers concerned with music, with the fine and applied arts, with the crafts, with the dance, with the theater arts, and with the aesthetic aspects of literature come together for discussion and planning. It becomes evident to them that they have a common goal and a common postulate — the postulate that if a person is to be properly educated for life in a modern world he must be responsive to the many-sided appeal and significance of beauty. They come to see that the content and techniques of their various arts are not ends in themselves, but means to achieve a common contemplated goal — the arousal and promotion of responsiveness to aesthetic values in daily life. This must be their platform. And such a platform will have four planks.

1. These various departments will agree systematically and consciously to promote *aesthetic production* — the actual production by pupils of original works of art in each of their several fields. (I do not use the word "creation" partly because it has been used to decrepitude, partly because, if it means anything at all, it means far more than the composing of original music, the painting of original pictures, or the writing of poems.) Artistic production is always the projection of an emotionally weighted and significant idea into an expressive form. It is exactly the same whether the producer is a Beethoven developing a Ninth Symphony, or a first-grader painting a winter scene. The productive endeavors of a child, when properly understood, guided, and encouraged, are stages in his aesthetic education. This is why one learns more about the pictorial art by painting pictures, even bad ones, than by just looking at them — why one learns more about the true inwardness of music by composing music, even very crudely, than by just listening to it or playing it. At first sight this may seem a trifle remote from practical educational concern. It is not. We want our aesthetic

education to transfer to life. And aesthetic production, properly directed, is precisely the medium by which this is brought about. Through it the learner learns to recognize possibilities for tonal, visual, verbal, kinaesthetic, and imaginal beauty whenever and wherever he comes across them, and to do something about them. And this is what we want.

2. Our various departments will agree systematically and consciously to promote *aesthetic reproduction* — the reproduction of works of art which already exist. The performance of music and the production of plays are the two most obvious instances. But they are by no manner of means the only ones. The point and value of aesthetic reproduction as an essential element in aesthetic education lie in its being the process *par excellence,* by which one comes to possess that work of art — to feel intimately and strongly its meaning and appeal. Clearly we have here an educational principle with some extremely stringent practical implications. It can be completely stultified when a senior high-school orchestra works for months on end at a couple of contest pieces, or when endless labor is invested in the showy production of a single play. In such situations the pupils are not acquiring aesthetic insights, but learning routines. So if aesthetic reproduction is to discharge its proper function in aesthetic education, there must be many and varied opportunities for it in the course of each successive year.

3. The various departments will agree systematically and consciously to promote and develop *aesthetic taste.* It is perfectly true that every person's standards of aesthetic appraisal must be sincerely his own and that the attempt to compel pupils to like or dislike the allegedly proper things by order is hopeless. Yet there are principles of criticism, principles of taste. And the problem is to develop, select, arrange, and use curriculum materials which will make pupils aware of these principles, not, to be sure, at first as verbalizations, although explicit verbal analysis and formulation most decidedly has its necessary place.

4. The departments will agree to promote and systematically and consciously to encourage *aesthetic pleasure.* A very essential element in anybody's aesthetic education is to learn both what there is to enjoy, and also how to enjoy it. This immediately suggests a very wide range of practical procedures. What a fine reproducing instrument can do with music, what fine recordings are available and where they may be secured, what can be done in the way of fine reproductions of pictures and where they can be secured, the pleasure that can be gained from the free group or individual performance of music or the reading of poetry — these may serve to suggest the almost endless considerations which

present themselves. Clearly, if we want the arts to play an important part in the life of the average person, it is wise to show him how to gain enjoyment from them, both as a listener, a spectator, and a participant.

Certain general comments will throw light on this entire conception. It is a great deal more than a scheme of integration, as ordinarily understood. Specifically what it envisages is a number of groups of workers in the various arts all moving along the same lines and following a common policy. The whole scheme is in contrast to integrations in terms of social science and history, which are so often undertaken. It does not propose to bring the arts together by taking up the aesthetic concerns of Esquimaux or Hottentots, or the aesthetic manifestations of various historical periods. Instead it brings them together in their own right. And it should also be said that the plan in no way implies that we should be indifferent to the qualitative excellence of our high-level performing groups and individuals. But what we need to do is to organize work which will have significance and appeal for everybody — to be sure that we have a very broad and inclusive foundation whatever else we may not have, and then—and only then — build our edifice as high as we can. Fine performing organizations should furnish opportunities for valuable educative experiences for their own members; and as a matter of steady and deliberate policy they should be used to fertilize and stimulate the whole program of aesthetic education right down to the kindergarten.

The essence of the scheme can be expressed in a single word — cooperation. Summarily put, this is a scheme by which workers in the various arts can get together in terms of a common aim. Clearly this can place them in a very strong position *vis-a-vis* the public, the board of education, and the administrative authorities who determine budgets and schedules. They have a common, simple, and convincing story to tell. The actual carrying out of the scheme into detail can, of course, be indefinitely variable. And no doubt it should be, for it must be worked out with reference to the human situation it is intended to serve. But the clear aim is always the same. It is to use the arts as a means for making human beings responsive to aesthetic values and disposed to seek and emphasize them in their daily lives.

[*James L. Mursell is a member of the faculty of Teachers College, Columbia University. Reported from the* Educational Forum, *VIII, (January, 1944), 151-57.*]

THE COST OF ATTENDING HIGH SCHOOL

PAUL B. JACOBSON

In the Bulletin of the National Associaition of Secondary-School Principals

EVER since George S. Counts made his pioneer study of the selective character of secondary education over two decades ago, we have known that children from the families in the top economic groups persisted in school while those from the families in the lowest income groups dropped out. In the intervening years other investigators have reported similar results. The findings of Howard M. Bell (published in 1938) in the Maryland survey conducted for the American Youth Commission indicated that children from the most favored economic groups continued in school with a relative frequency 11 times as great as that observed for children from the lowest income groups. Of the relatively large percentages attending from well-to-do families, eight out of ten graduated. Of the relatively small percentages from the under-privileged families, only one out of ten who entered persisted to graduation. Quite naturally Bell reached the conclusion that the strongest single factor in determining what level a boy or girl will achieve in school is the father's occupation. The findings of the New York Regent's Inquiry (published in 1938) buttress the findings of Bell. There are, of course, other reasons, such as lack of ability, to explain why students do not remain in school until they are graduated. But no one can doubt that economic circumstances of the family do influence attendance.

During the life of the National Youth Administration a study was made which casts some light on this subject. This study was made to determine what expenditures high-school students actually make while attending high school. It was thought that the adequacy of $6 a month which N Y A-assisted students were allowed to earn should be evaluated more objectively, for it was clear that the sum of $6 had been selected arbitrarily. When the NYA was liquidated, all the materials were turned over to the writer with the request that the tabulations be completed and that the material then be published as a part of the literature on high-school administration.

Altogether 134 high schools and 19,459 students contributed the data used in the study. The schools were selected to represent rural areas, small cities, and large urban centers. They were located in 29 states. The enrolment of the schools varied from 31 at Panama, Illinois, to 3,690 in the Proviso Township High School at Maywood, Illinois, and the number of students per school furnishing data varied from 16 in the Leon County High School,

Tallahassee, Florida, to 775 students in Northern High School, Detroit, Michigan. Each student participating was given a code number so that his identity was kept confidential, and the record of this identification and occupation was kept at school. Forms were devised for the student's recordkeeping and for the summaries. In analyzing the data secured every effort was made to equate varying conditions in order to make the results comparable and it seems fair to say that the expenditures reported here are a conservative statement of the cash expenditures made by high-school students during a school year.

The lowest average expenditure per school, $19.24, was reported for 72 students in Peabody High School, Milledgeville, Georgia. The highest expenditure, $152.91, was reported for 775 students in Northern High School, Detroit, Michigan. The median for the 134 schools is $75.74 with two-thirds of the average expenditures falling between $50 and $100. With one exception, there is a gradual increase in cost with the increase in size of community, rising from $58.50 in communities of less than 1000 population to $103.50 in communities of over 100,000.

The average expenditure for individuals was examined in the study as to grade in school, sex, and occupational groups. Expenditures increase regularly from grade to grade and are greater for girls than for boys. The average expenditures reported for all the 19,459 students who participated was $81.96—for boys $73.74 and for girls $87.66. The difference of almost $14 was almost entirely for clothing—the largest single item of expense on the list. There is a regular progression by grades from $62.96 in grade nine to $109.14 in grade twelve. Such progress in expenditures checks with observation. Expenses do increase as students progress through school. Those who cannot conveniently "pay their way" tend to drop out of school and to that extent reduce the democratizing function of the "free American high school" and increase the expenditure made by students in the upper years.

There are fluctuations in expenditure among the youth from the various occupational groups, ranging from $96.54 for the children of professional workers down to $69.19 for those of the unemployed and unemployable. The median of school expenses was set, following an examination of all data, at $82. For well-to-do families the expenditure of $82 a year by a boy or girl enrolled in the high school is a small matter. For the average family with an income of $1800 or less, the expenditure of $82 for one or more children is a serious matter. For those with annual incomes of less than $800 such expenditures are impossible.

In periods such as the present

there is no problem for most students to find a well-paying job which enables them to stay in school without financial embarrassment and also enables them to assist in the war effort. But in periods of "hard times," such as the 1930's, how the children of all the people shall be enabled to stay in high school is an open question. Higher average family incomes would no doubt solve the problem, but that is a matter about which schoolmen can do little. More general provision of free textbooks, free school supplies, free transportation, and free lunches would help, but the addition of such services would increase public costs; in many communities this is impossible. Some form of federal assistance to enable the individual to carry the cost or some form of federal assistance to the schools to enable them to furnish the necessities is indicated. But unless the boy or girl has or can earn the necessary clothing, the largest single expense, some individuals can hardly stay in school. To the writer it seems desirable that we schoolmen spend some effort now in attempting to secure funds earmarked for needy students to earn their way in the secondary school. Funds from which students can be paid for doing desirable work are needed now in areas where wages are low and jobs are scarce. They will be necessary in thousands of communities after the war. Every able and willing boy or girl has the right to be able to earn the money necessary to stay in school with decency. This certainly does not preclude scholarships for the very able nor does it preclude seeking federal assistance for schools so that school districts may pay adequate salaries to teachers.

The people of the United States, through their Congress, have always been interested in the welfare of individuals and the development of the nation. The Homestead Act gave land to *individuals* following the Civil War. Grants to colleges of agriculture and mechanics disseminate useful knowledge to *individuals*. Federal assistance in the 1930's was provided so that *individuals* could have minimum security through federal work programs. Now is the time for organized schoolmen to lay the groundwork which guarantees that *individual* boys and girls may earn a high-school education.

[*Paul B. Jacobson is Principal of the University of Chicago High School. Reported from the* Bulletin of the National Association of Secondary-School Principals, *XXVIII (January, 1944), 3-28, 65.*]

THE SURVIVAL OF THE COLLEGES

GUY E. SNAVELY

In School and Society

SINCE the passage of the Selective Training and Service Act by Congress in September, 1940, the time the colleges first felt the full impact of World War II, not a single accredited standard four-year liberal-arts college or university has been closed. Of the 50 or more institutions of higher education that have succumbed or been discontinued temporarily, the most are junior colleges or professional schools. Only a handful of the latter are first-class ones; these are located in rural areas. It is obvious that high-grade law schools connected with state universities, temporarily suspended, will open, probably with larger enrolment, immediately after the war.

The outlook had been gloomy before the announcement by the Army and Navy of their A-12 and V-12 and similar programs, which would require usage of all college campuses with competent facilities. Some 500 of the colleges met the requirements. Thus all were chosen except the women's colleges and a small number of others with very limited or no housing facilities. To a few of the larger women's colleges, like Smith and Hunter, were assigned units of WAVES for training.

In the spring of 1943, the Army and Navy had developed their plans. Both training programs require courses which can be taught by the regular college faculties. Obviously, there is a shift of emphasis to certain courses like English, history, mathematics, and physics. Fortunately many highly trained and experienced professors were able to "brush up" in refresher courses so as to shift from teaching such courses as philosophy and art to instructing in French, mathematics, or some other crowded course for "the duration."

As was to be expected the enrolment of civilian men in the colleges in the fall of 1943 dropped to about 25 to 30 percent of the enrolment of the year 1940-41. But the total enrolment, including units assigned to colleges by the Army and Navy, is probably higher than any previous year. There seems to be a notable increase in enrolment of college women. This is true in the coeducational institutions and particularly so in the colleges for women only.

Unfair is the criticism that the colleges need tremendous revitilization. Their record under wartime conditions indicates great vitality, and is further attested by the anxious interest the Army and Navy have finally exhibited in their desire to utilize them to the utmost. Like every other agency under human

direction, the colleges are subject to improvement. During the war and particularly in the transition period from the time shooting ceases until the men are demobilized from the Army and Navy, the colleges of the nation will continue to have some rude shocks.

College administrators and all friends of the liberal-arts tradition will have cause for concern immediately after hostilities have ceased. In President Roosevelt's recent message to the Congress, he urged the appropriation of a billion dollars for the further education of men and women in the armed forces whose education had been interrupted by their military service. A grateful people will approve this proposal. For the welfare of the nation at large, as well as in justice to the men and women involved, the country should be favorable toward giving opportunities for further education to those who gave up their schooling for the war.

Assuming that demobilization will drag on through some months, veterans in large numbers and the normal enrolment of high-school graduates will crowd the college campuses. It is to be feared that the priceless features of the liberal-arts tradition will be lost in this increase in enrolment. It will be difficult to find the "golden personalities" needed as additions to faculties; the dormitories and other building facilities will be greatly taxed; most to be feared will be the tendency to lower standards. After World War I, college enrolments increased by leaps and bounds. The enrolments in some state universities were doubled immediately. One or two well-known ones in the Midwest found themselves unable to assimilate such increases in the freshman classes so they set up a special type of college for those who were not able to maintain the standard pace — in college parlance, "the dumb bunnies."

High statesmanship among the leaders in liberal education will be needed greatly in the immediate future. From the liberal-arts colleges have come the leaders who evolved and the later ones who have kept vigorous the American ideals of our republican form of government. From them also have come the other leaders of our remarkable advance in cultural and material progress.

Guy E. Snavely is Executive Secretary of the Association of American Colleges. Reported from School and Society, *LVIII (December 25, 1943), 502-4.*

THE PLIGHT OF THE COLLEGES

WALTER CROSBY EELLS

In the American Association of University Professors Bulletin

MORE than three-fourths of the nearly 2000 institutions of higher education in the United States have no probability of securing government contracts for training members of the armed forces. Relatively few of the smaller institutions are likely to receive any aid from this source to assist them in the difficult struggle for existence which many of them will face until the war is over.

The writer has studied last June's single, revised, composite "list of contemplated and present use of institutions of higher education for training purposes by the Army and Navy as approved by the Joint Committee (for the Selection of Non-Federal Institutions) to date" and from his summarized data presents the following information. The large universities are to be utilized by the government almost universally. Only one is not included. Only a little more than a third of the "other colleges and universities," however, have any chance to be used; about a quarter of the teachers colleges and normal schools; one-seventh of the professional and technological schools; one-twelfth of the Negro institutions; and only one twenty-eighth of the junior colleges. The financial plight of many of these smaller institutions is, or is threatening soon to become, serious if not desperate. Some of them have already been forced to close — for the duration if not permanently.

Nor should the Army and Navy be blamed for this condition. It is not the function of the Army and Navy to preserve the colleges — but to train young men and women most effectively to win the war. The policy adopted by the services to achieve this result is one of training men and women in large units. It may be that some of the colleges not approved by the Joint Committee are not worth saving. Perhaps they should go out of existence and the war should be thanked for hastening such a desirable end. But many Americans feel that small colleges have made an invaluable cultural contribution to American civilization and that many if not all of them ought by all means to be preserved, if possible, for continued significant service in the period after the war.

What is the wartime situation that faces many of these colleges? Mounting costs of operation for materials and services, decreasing returns on endowment and other investments, shrinkage of grants and gifts, and sharply declining student bodies with resultant decrease in income from tuition. Under the Enlisted Reserve programs of both the Army and

Navy some months ago young men were taken into the services but kept in the colleges which they were then attending — small as well as large — for training. But now the government through the lowered draft age and the operation of the Army and Navy specialized training programs is taking thousands of young men away from the smaller colleges and sending them to the larger universities — with all personal expenses paid and with all cost to the larger institutions met by government funds. Has the federal government any obligation for compensatory aid to those institutions whose normal economy has been so disrupted by general wartime conditions and by direct government policy? Or are they to be considered merely unfortunate but inevitable casualties of wartime policies?

Does the federal government have any obligation to aid the smaller colleges or their students as an emergency matter? If so, should such aid be extended to the colleges, or to the students, or both? If to the students, should it be in the form of scholarships, or loans, or payments for work done, or some combination of these? If to the institution, should it take the form of subsidies for specific types of service such as adult education, civic education, preparation for war industries — or downright grants? In either case how shall funds be allocated to institutions of different size and type? What federal agency shall have charge of the administration of the funds? Can there be federal aid to higher education, even as a purely temporary emergency measure, without undesirable or dangerous types of federal control? Can college leaders in the United States agree on types of aid which are desirable and feasible? Is it better for a small college in distress to preserve its independence — and perish; or receive some degree of emergency federal aid and possible resultant partial control — and survive? These and many related questions press for answers in the very near future. They are not academic but vital to the very existence of many of our higher educational institutions. No individual is wise enough to have all the answers. But answers must be given, either actively through conference and agreement or passively through disagreement and inaction.

In earlier months the Army and Navy and the War Production Board were chiefly interested in awarding contracts to industry in large units for munitions and supplies. The continuance and future of the great corporations and industrial plants was assured by this policy, but the little businessman was left out in the cold and threatened with extinction. Now, however, the Smaller War Plants Corporation, through intelligent constructive service, is helping to save the little fellow in business, now and after the war, thus prevent-

ing the nation from developing the hundreds of ghost towns which would result if these small businesses were permitted to perish. Is it not perhaps time to consider now also the need for a "Smaller Colleges Corporation" or something analogous in the field of higher education?

The difference, unfortunately, at the present time is that it appears that the initiative in the case of educational institutions, if taken at all, will not come from the executive branch of the government. In the past months, it is true, various plans for extensive aid and relief to the colleges have been discussed and formulated by the U. S. Office of Education (directly and through its Wartime Commission), by the War Manpower Commission, and by other agencies. It has become very clear recently, however, that none of the executive branches of the government can be expected to present to Congress any comprehensive program looking toward the preservation of our smaller institutions of higher education during the war.

The Veterans Administration in its rehabilitation program will probably use the facilities of many of the colleges and other minor programs may be developed. None of these, however, is a comprehensive program and none will adequately meet the need of many of the worthy colleges not eligible for government wartime contracts because of size. If any comprehensive plan is presented to Congress it is evident that the initiative will have to come from the colleges themselves — through some existing organization or a new one formed for the purpose. The American Council on Education is the most comprehensive organization representative of all phases of higher education, but its established policy prevents it from actively advocating national legislation. Have the higher educational forces of the country sufficient unity and cohesion to enable them to agree on a desirable emergency program and press for its adoption by Congress? Numerous individual congressmen and senators, many of them graduates of the smaller colleges of the country, have expressed themselves as unwilling to see hundreds of these institutions close their doors. Many of them are ready to adopt a reasonable plan to prevent such a catastrophe — but they feel, and rightly, that such a plan should be formulated and presented by the educational leaders.

[*Walter Crosby Eells is Executive Secretary of the American Association of Junior Colleges. Reported from* American Association of University Professors Bulletin, *XXIX (October, 1943), 508-17.*]

TEACHING VOCATIONAL STUDENTS TO WRITE AND SPEAK

SIMON CERTNER
In the English Journal

THE growth of the vocational schools is an encouraging phenomenon manifesting the realistic desire of increased numbers of American parents, a majority of them first- or second-generation Americans, for a coalition of liberal education with the preparation for a job in skilled industry. However, in the attempt to bear away from the liberal arts concepts, administrators of the academic subjects in the vocational high schools have strayed too far in the direction of vocationalization and utilitarianism in subject matter. Thus English has too often been transformed into shop English, emphasizing a heavy preponderance of shop terms and forms, of literature adapted for specific trades, and an over-all neglect of the cultural factor in learning. Forgetting that the vocational schools are a part of secondary education, theorists have created outlandish fallacies on the pretext of correlation of trade with academic subjects, and they have expostulated at great length on the differences between the vocational and the academic school child.

What are the vocational school youngsters really like? They are the forerunners of a new mass education on a higher idea plane than has ever been accomplished before in our country. These children are drawn from a stratum in our society which never before so universally sent its children to school for so long. These schools attract a segment of youth which was never clearly happy in the old academic school environment, because the correct formula of many simultaneous equations had not yet been found for satisfying their legitimate demand for a democratic combination of *school,* in the sense of academic learning in the liberal arts, combined with *work,* in the sense of vocational training for a livelihood. It is up to the vocational schools to provide the matrix and form in which the desire of a large group in our population can be satisfied. It is up to them to become a school as well as workshop.

Now that these children are in vocational school, can we also interest them in academic work? They choose to go to these schools because they wish to become skilled workers in a trade or industy, just as the child preparing to be a doctor or a teacher desires to become a skilled practitioner in his field. The desire to become a doctor or a teacher is not only a worthy end in itself, but is made to open the door to all learning. Similarly, the desire of the child to become a skilled worker is not only paramount in itself, but must become the magic touchstone by which the vocational

school induces him to take part in all the human and liberal arts. Once the child is happy in doing his vocational work, upon this firm rock can be based the complete round of secondary education.

It is the conviction of this writer that, when proper methods and materials for teaching the nonbookish child are worked out, great cultural progress will interfuse the nation's future. When the problem is clearly stated, when the situations are marked out and known, and when the needs are diagnosed correctly, such methods, techniques, and devices can be found as will teach their subjects at a high level and make possible inestimable cultural advances in the plain citizens of our democracy.

What methods are best employed with such children? The best methods must be founded on theories of mass education; that is, great variation in individual ability must be anticipated, but this is offset by identities of interest and experiences. Thus any technique devised should present subject-matter material which is the common experience of all mature mankind living in a single community—such as our United States has become—but which allows the experience of the whole community to be viewed through the soul of one single individual. For this there is needed endless variety of subject matter pertaining to the common experiences of the common man, appealing on a middle intellectual pitch, but with the highest moral, emotional, and patriotic idealism, using such incentives as challenge all adolescent youth.

It is the object of the writer to tell of some methods he is using for making the vocational school pupil competent to breast the many-faceted life of our times. How, for example, can the teacher arouse interest in the significance of the news of the day for children to whom the better newspapers are a closed book? A typical method is first to state a selected news item in briefest form. Details of the news event are expanded by the class and by the teacher together until the knowledge of both regarding the facts is squeezed dry. Following is one:

The facts: "The Nazi propagandists boast of their 'fortress Europa.' They tell us it would be wise to turn our guns against Japan, since Europe is now a closed and powerfully defended zone. The Japanese say nothing about it." *The problem:* Do you believe their fortress is really impregnable? How much do you think it will cost us to breach the wall of Europe? Is there a clash between Japanese and Nazi interests? What do you think our forces will do, attack Japan or Germany in greatest force?

Notice that the method requires almost no exact knowledge, yet, under the teacher's guidance, much exact knowledge can be mastered and desirable attitudes built around it. Occasionally, the interpretations

should be written out in swift five-minute writing lessons, with the content always held to be paramount. The written interpretations are read aloud and compared.

By what means can the creative impulses be stirred to improve the content of the written composition among pupils in vocational schools? Within the topics and the titles themselves there should be powerfully motivating and provocative ideas. What differentiates the unlearned from the more learned child is the need of the former for quickened and more familiar stimuli in great variety. In choosing topics for creative writing or for the expression of thought on social problems, each word should be compact and with manifold and varied connotations, and the ideas called out should be such as are common to the experience of the great body of our people. The wording should be lively and colloquial. The following are a few examples of topics and titles which have been found to work successfully: (1) Every Time I Think of It, I Have to Laugh (Sigh, Smile, Feel Sad, Bitter, etc.). (2) If You Want to Start Something at My Home (Club, Class, etc.) Just Mention — (the War, Hitler, the Japanese, Dresses, Baseball, the Movies). And in the field of social problems: (1) Have the radio and the movies diminished the love for study and reading? (2) Will the next generation do better than the previous one has done? One measure of intellectual achievement in these compositions is their *length*.

But, I may be asked, don't you pay any attention to remedial work? How do you teach these children grammar? Before spoken and written English can be improved, these not fully articulate children must be encouraged in speaking and writing, *however imperfectly!* The correction should never be part of the expression. If remedial exercises are undertaken, it is best that they be separated from the work of expression and of creation. Furthermore, only a few minutes at one time should be spent on remedial work. Both grammar and corrective English are best taught as five- or ten-minute exercises preceding another lesson, repeated several times per week. Best of all ways to teach correct English is by using the pupils' own *spoken* sentences. Examination of a few incorrect sentences each day will work wonders in reforming speech. Each school will have its own list of error groups, with a tang peculiar to the local distortion of American idiom, such as: (1) It's more your fault than anyone else. (2) She goes without no hat on. (3) I have a friend of mine who enjoys skating. Once the ear lies in wait for these errors, an amusing and useful thesaurus is unrolled constantly. It is wisest to use the most recent ones committed; the timeliness is communicated. The class can feel that they are hot off the brain pan, and this feeling makes

them enthusiastic to seek remedies with an eagerness that no textbook can ever hope to arouse. Thus, the errors are remedied in the same helterskelter order in which they are committed, and the process of correction is never confused with the more ardent and intellectual processes of creation.

The best way to teach various aspects of theoretical grammar is in short spells. A few sentences exemplifying the grammatical principle to be mastered are on the board when the pupils enter the room. The grammatical principle is expounded by the teacher briefly, and the sentences are scrutinized for their bearing on the principle. I give many lessons in sentence sense, mainly in synthetic construction of a sentence from sentence and clause fragments. But I dwell little on sentence analysis or on the teaching of punctuation marks. In all such work the teacher's created sentences should be dramatic, timely, and inspirational. Use of the textbook is a deadening and ill-fated procedure.

Even when building the concept of a new word in vocabulary or a new term in general use, the same colloquiality, breeziness, informality, and familiarity should lie comfortably within the context in which the word or the term is explained. The teacher should take for granted that the class knows little of our cultural heritage and should tell every story that circumstance throws in the way of the class's thirst for sheer knowledge. After the telling of the story of David and Goliath, the class will work out a modern application such as "Once our war program is in full swing, the Axis *Goliath* will topple in the dust." Then there are the allusions to more native experiences that have gone into the language—"pull your punches," "stick to your guns," and a thousand others from farm, field, factory, sports, and the trade. Tell what such terms mean, have the class guess in what field of endeavor they originated, then have them compose sentences using the terms. Not only are such word games as these a mature diversion but they have the most intimate relationship to the needs of these culture-starved children, to say nothing of affording inexhaustible sources for lessons with fruitful variety of content.

[*Simon Certner is a teacher of English in the Bronx, N. Y., Vocational High School. Reported from the* English Journal, *XXXII (December, 1943), 539-47.*]

EDUCATION AFTER THE WAR

WM. CLARK TROW
In the University of Michigan School of Education Bulletin

THE impact of the war on education, great as it is, has hardly been felt by our educational institutions for the reason that the elementary and high schools are not called on for any great readjustment, and the military programs in the colleges and universities are attached to the institutions but have not become a vital part of them. The nature and extent of the enormous training program carried on by the Army, Navy, and Airforce and by the great armament industries is not fully realized even by those who are engaged in it. It is a thing apart, and only a little information is given out. What will happen when there is no more need for secrecy, and when the thousands now engaged in wartime training are released? What changes will they bring back with them to our civilian institutions? Let me record a few of the possibilities.

1. *Financial discrimination will be reduced, if not eliminated.*—Too many people have been paid while they learn, both in the military forces and industry, to consider it an unusual or undesirable procedure. And while all should be done that can be done for returning soldiers, we do not want to discriminate educationally against the children whose only fault was that they were too young to be drafted.

2. *Correspondence study will be increased.* — Newer methods of instruction and testing developed in the Army will find their way into more common use, not only in academic subjects for people of all ages, but also in the form of special unit courses when the objective is special knowledge for competence in various services. Many will wish to learn while they earn. They should be given opportunity to do so.

3. *Psychological services will be more fully developed.*—The various kinds of tests that have been developed for military personnel will find their counterparts in civilian adaptations of these instruments, supplementing if they do not succeed the "units" and "semester hours" based on what a student has *had,* instead of what he can *do.* And they will be used to assist more than ever before in educational and vocational guidance.

4. *There will be a greater emphasis on programs of study and less on a multiplication of courses.* — When it is known that certain knowledge, skills, and techniques are needed for certain kinds of work, the knowledge, skills, and techniques should be taught in a well-integrated program. Elective courses should be provided, of course, to supplement the program of study and cater to individual interests and special talents. But the *program* will be required, and con-

stant modification will, I hope, be made in it as the needs for changes are demonstrated. These programs may last six months, a year, or three or four years, depending on the number and complexity of the skills required and the incompetent in any program will be discovered early and not "washed out." We do not need to borrow this wasteful technique; instead, the capacities of all will be carefully studied, and the misfits will be transferred to other programs where they have some chance of success.

5. *Objectives will be more clearly defined.*—There will be an emphasis on training, and less emphasis on the less desirable elements in a so-called liberal education. There is a danger that our educational institutions become training schools and nothing more, and this should be avoided. But a definite objective is not necessarily in opposition to education in the broader sense. Much of the failure of instruction is due to the lack of any clear-cut goal or objective that is recognized or accepted by the learner. If he is learning to box, or weld, or cut out an appendix, and if he wants to do these things, he will work hard at learning the job. Some few take a delight just in learning something they didn't know before. But the majority need far more direct motivation than they have had in the past.

6. *Greater emphasis will be placed on learning to do.*—One must know, but except as one accepts a somewhat over-intellectual, nonutilitarian philosophy, one knows in order that he may do—wipe a joint, play a violin, make up a balance sheet, lead a group, fix a radio, or read a blueprint. That this outcome may be more assuredly obtained, wider use will in all probability be made of the problem method, especially on the higher educational levels. The method of practice teaching, the mock court, the machine shops, and the laboratory will spread to other less professionalized fields so that students will have more opportunity to obtain practice under instruction in doing the things they are learning to do.

7. *More intensive training will be required.*—It is my guess that educational programs will be more exacting and that those who do not exert themselves will certainly find difficulty in obtaining the advantages of state supported schools and colleges.

8. *Language study will be more effective.*—The Army is employing methods, worked out by the American Council of Learned Societies, by which considerable competence in speaking and understanding a foreign language is obtained in a year's study. The plan involves two factors—a native speaker, one who speaks the language correctly, and intensive instruction six days a week for two or three hours a day. Those who need a language and intend to learn it can do so. A com-

plete or scholarly knowledge, of course, will require more time and application.

9. *Social-studies courses will be supplemented by programs of regional study.* — With all the mathematics and physics and engineering the Army requires, it has discovered that officers and men in order to function effectively in foreign countries need to know something about these countries. Courses in high schools and colleges as now set up do not furnish this knowledge. They furnish knowledge about history, geography, sociology, social psychology, economics, and political science, but they do not teach about a country or region. Things are never put together so that students obtain a unified picture of a culture. It seems probable that many soldiers, through their regional study programs, have learned more about Sicily than they know about their own home country.

10. *The educational goal of good citizenship will be more widely accepted.* — This acceptance will imply more vigorous study of what the goal implies and how it may best be obtained. The future developments I have cited are all in the right direction. But the goal and its attainment involve more complex considerations. They involve the recognition of widely different sets of life values. Knowledge, wealth, and power are horribly dangerous weapons when they are turned to antihuman objectives as we who are living in this terrible period of world history well know. We the people, we who are our own rulers, cannot, and we need not, allow them to be used in this way. Knowledge, wealth, and power can bring us the greatest happiness if we use them for social, not for antisocial ends. The future depends very largely on the kind of education we provide for our children. We can blunder along and make the same old mistakes over and over again. Or we can learn the lessons of experience, profit by the impetus of the present world catastrophe, and emerge sound and strong. We are a nation of free men who accept responsibility, see what is to be done, learn how to do it, and go ahead. This is our heritage. This is our way of life. May we continue to hold to this way of life and carry on.

[*Wm. Clark Trow is Professor of Educational Psychology, University of Michigan. Reported from the* University of Michigan School of Education Bulletin, *XV (November, 1943), 17-21.*]

ENGLAND'S RECONSTRUCTION IN EDUCATION

SIR FRED CLARKE

In Britain Today

WAR has been an efficient, if stern, teacher, so that weaknesses in education have been not only laid bare but recognized for what they are. The will to reform was never more widespread. Now, the brightening prospect of the war has brought hope to reinforce will, and planning for the future seems to have a firm foundation to rest on. A Government White Paper has appeared setting out a comprehensive plan of educational reconstruction. This has been well received by public opinion, and debates on it in both Houses of Parliament have given it virtually unanimous approval. Indeed the main criticism appears to be that the plan is so good that Government ought to carry it into effect much more quickly than, at the moment, they think possible.

The central idea of the plan may be summed up in the phrase *removal of barriers*. Wartime experiences have now quickened an urge towards equality, which was already growing strong, and the discriminations from a past age are no longer found tolerable. It is easy, therefore, to understand the line which the main proposals follow. They conceive of an education for all arranged in three stages:

1. Primary education from 5 to about 11. The name "elementary," as a school created and designed by higher authority to meet the needs of those who used to be known as the "laboring poor," is to be dropped and few will regret its passing. The term had a strong class significance and the elementary school has suffered much in consequence.

2. Secondary education from 11 plus to 16. The age of school leaving is to be raised from 14 to 15 as soon as possible after the war and to 16 when facilities have become available. Three main forms of curriculum are contemplated. First, an academic form designed largely for those who will go on to the universities and the professions. Second, a "technical" type of curriculum, planned for those whose destiny is industry or commerce as skilled workers. Third, a more general, unspecialized curriculum, though with variety of offerings, for the large intermediate mass. The first type is represented by the existing schools officially classed as secondary, now to be known as Grammar Schools. The second we have with us in all too small supply in the Junior Technical Schools. These will be much increased in numbers and expanded in respect both to length of course and variety of curriculum provision. The third may be seen as the present "senior" schools raised to secondary status

and expanded much as the Junior Technical Schools will be. This more general type is to be known as the Modern School. It is pretty certain that, following the English preference, these different kinds of provision will be made in distinct and separate schools, though with facilities for the transfer of certain pupils from one to another. There is, however, a growing movement, especially among the workers, in favor of the large, all-purpose, "multilateral" school on the North American model. This is favored, not only because it facilitates the adaptation of curriculums to individual needs, but because it is calculated to discourage class distinctions.

Evidently great care and skill will be required in directing each boy and girl at the critical age to the appropriate type of school. Faith in the "catastrophic" type of examination for this purpose is virtually dead, and indeed such a device is no longer relevant to this new situation. Informed opinion supports the idea of regarding the years from 11 to 13 as experimental and prognostic, a period during which the pupils, working on a broadly common curriculum, will be subjected to especially close observation and record. Then on the strength of all the observations and records up to date it is hoped that at about the age of 13 the decisive allocation to suitable types of schooling can take place.

3. After the secondary stage, for those who leave at 16, there is to be compulsory "further" education on a part-time basis up to 18. One full day a week is suggested, but this will very probably be increased later. It is probable that for some the obligation will be fulfilled by part-time attendance at a Technical College, and for many there will be the Young People's College.

This part of the national enterprise has been much illuminated and stimulated by the rapid but somewhat disorderly growth of a National Youth Service. There has been a general awakening to a realization of the unsatisfactory conditions under which so many young people live and work, of the waste of talent and potential ability that occurs, of the undesirable influences brought to bear on many young folk, and of the dangers that may result from continued neglect. So now there is much activity in this field of work. Local authorities have set up Youth Committees appointed organizers and teachers, subsidized clubs and other youth activities, and otherwise concerned themselves more or less vigorously with this work. A Government Committee has, as one of its duties, the preparation of a scheme for the recruitment and training of youth leaders. The voluntary organizations which are so characteristic of English methods are playing an active part in all this work. This range of activity is very congenial to the English temper, with its strong sense that

education is wider than schooling, that not all the work of education can be done by the school, and that in a close-knit historic nation like England there are many forms of community life and action from which educative virtue can be extracted. But the place of the organized school amid all these wider and looser forms of action is still undetermined and, indeed, not much thought has yet been given to that particular problem.

Some account must be given of the adjustments this plan entails, and of the conditions, other than purely educational, on which the prospects of realizing it must depend. There is the rather considerable change in the local administration. At present the counties, and the boroughs which possess county powers, have charge of local administration throughout the educational range, including both elementary and secondary schools, technical and "further" education, adult education, and even financial support to universities, youth organizations, and almost any form of activity which has proved of educational value. But alongside of these, in the noncounty boroughs and the large urban districts, there are authorities which have the supervision of elementary education and of that alone. These have considerable political influence and may be expected to offer resistance to the White Paper's proposal to sweep them away. The proposal is that only the counties and county boroughs should continue, that the smaller ones of these should be merged into large areas, and that in the large areas a system of "district committees" should be set up to cooperate with the main local authorities.

Some change in financial relations is also to be expected. At present the cost is borne in about equal proportions by the state and by local taxes. The share of the state is expected now to rise to about 55 percent and more will be done by the state to assist those authorities which are financially weak. At present a too-wide disparity of resources as between one authority and another gives rise to inequalities of opportunity which are in plain conflict with democratic principles.

A further adjustment, one of peculiar difficulty and intricacy, involves ownership and control, and arises from what is known as the "dual system" of publicly provided and Church provided schools. The Church schools are mostly small and in rural areas. The buildings are often old, poor, and inadequate. Some would end this system altogether, but support for compromise is strong. Broadly the compromise is that if the Church can raise at least 50 percent of the cost of putting a school building into good modern condition it can retain most of its present powers. Otherwise the local authority takes full possession and

control. General opinion is that it will not be found easy to fulfil the condition and that Church schools supported by public funds will tend to disappear, at least at the primary stage.

A third adjustment is one that no legislative or administrative change can effect. It concerns the planning of curriculums for the varied forms of secondary education. A difficulty will arise undoubtedly from the high prestige which the traditional secondary (Grammar School) curriculum still enjoys. The great debate on this question is already well started and will ring through English schools and halls of learning for many years yet. At the heart of it is the great issue which touches so much else beside education: *To what extent, and in what forms, must the English tradition be adapted to meet the needs of the coming age?*

Now as to the conditions that have to be fulfilled if this great plan is to be realized. There is space to mention only two — a supply of teachers adequate in numbers and ability, and some rather sweeping changes in prevailing English attitudes, especially social attitudes. On the first of these, there is a wide feeling that channels of recruitment are too narrow, that the tracks leading into the profession are too few and follow too exclusively academic lines. Also it seems to be realized that considerable rise of the teaching profession in public esteem is essential. For the general raising of it much more wholehearted cooperation may have to be sought from the universities of the country.

The other condition, that of a change in prevailing social attitudes, may be illustrated by a remark uttered by the Archbishop of Canterbury in a recent debate on the White Paper in the House of Lords. He said: "There is no breach in the fellowship of our national life so deep as that created by difference in educational opportunities."

There is no disposition now to deny the inequalities, but instead, a growing resolution to remove them. The danger then arises of a too facile assumption that they can be got rid of by purely legislative and administrative measures. In a country such as this where tradition is so strong, where history and not rational planning is the key to every institution, and where educational forms and practices follow so closely the contour of the social landscape, this would be a disastrous illusion. The hope of evolving a genuine common primary school attended by children of all social ranks depends only in part on improvement in the publicly provided school. It depends also on decline of the faith among certain parents in the superior power of the "select" private school to turn out little ladies and gentlemen. The prospect of achieving a much-to-be desired unity in the teaching profession depends on the same hope

of social change. At present the profession is shot through and deeply divided by influences that are in no sense genuinely professional or educational but at bottom social.

Happily there are signs that these fundamental necessities are becoming recognized. Anyone who should attempt to forecast the educational future of England without taking full account of that fact would quite certainly be deceiving himself. In this connection it may be of interest to add that there are signs of a change of attitude among the critics of the "public" schools. This takes the form of a more just appreciation of the true *educational* value of these schools while continuing to protest against their social exclusiveness. So a solution is coming into view whereby the schools, instead of being abolished for their social exclusiveness, are retained and multiplied for their educational value. That would indeed be a significant pointer as to the direction in which this country is moving.

[*Sir Fred Clarke is Director of the University of London Institute of Education. Reported from* Britain Today, *(October and November, 1943), 6-9, 10-14.*]

Historians at the Scene

A DETAILED history of this nation and government at war is being painstakingly recorded almost as fast as events take place. As a result, the history of this war will be superbly documented. Actually two types of histories are being written. The first has to do with the administrative actions of the federal government. This is being done by a unit in the Budget Bureau under Pendleton Herring of Harvard University. James P. Baxter, President of Williams College, is doing a history for the Office of Scientific Research and Development.

The second type of history is the story of our fighting forces. The Army has already completed its history of the Tunisian campaign and it's reported that General Marshall, Chief of Staff, ordered copies for men wounded in the battles so they would have a better understanding of the fighting. Documents are gathered for the historians at every important Army and Navy operation. Dr. Walter L. Wright and Lieut. Col. John Kemper are in charge of the War Department's history while the Navy task is in charge of Capt. D. W. Knox and Lieut. Comdr. Samuel Eliot Morison.

CUES TO POSITIVE AND NEGATIVE BEHAVIOR

JOHN B. GEISEL

In the School Review

MOST teachers are agreed that a positive approach in dealing with pupils is more effective than a negative one. However, when it comes to explaining just what constitutes a positive or a negative approach, they have difficulty in giving concrete illustrations. Though teachers wish to develop positive behavior, they are not familiar with the specific techniques by means of which such improvement can be pursued. Some find selfimprovement too much for analysis and resign themselves to coasting along, at times managing very well and at other times not so well, and frequently feeling a frustration which they try to forget lest it disturb their peace of mind or influence them adversely on future occasions. Others, with a sigh, put it this way: "Well, I just try to be my natural self, and, if people don't like it, I'm sorry." Still others express their resignation as follows: "I try to have the right attitude toward people, and, if I feel kindly toward them, I'm pretty sure to do the right thing when I'm with them." Others, of course, adopt an attitude of hostility, resenting the fact that, as they say, "everybody has to be handled with kid gloves."

The last group will not concern us, for teachers belong, preponderantly, to the other three groups. They are definitely interested in self-improvement because they know full well how fundamentally important their own personal adjustment is in daily classroom activities. Actually the problem of improving one's personal and social relationships cannot be solved except by attacking it, and by making this attack part of everyday living. The following discussion of concrete positive and negative actions is submitted as an introduction or a mere beginning of such a study, which every teacher may carry forward in his or her relationships with pupils, fellow-teachers, and others.

Observation of the interactions of teachers and pupils reveals that effective behavior on the part of teachers comes chiefly under such heads as: showing interest, agreeing or approving, making balanced criticisms, showing affection and protecting, praising, understanding, and forgiving. The reverse of these actions or some degree of insincerity in their use may generally be classed as ineffective conduct. The former are called positive; the latter, negative.

Showing interest.—For a positive response the teacher shows interest in what the pupil is doing or saying, by paying attention, by listening intently, by looking at him, by turning one's body toward him, and by asking for more information on

the subject brought up. She might say, "Tell me more about it." She could expect a negative reaction if she said, "We haven't any more time for that."

Agreeing.—The commonest form of showing agreement is saying, "Yes," or nodding the head in assent. Other ways include smiling; concurring in the other person's choice of what to play, where to go, what to do; and cooperating in fun or work. A revealing comment is, "Yes, let's do that." Examples which are cues to negative response are, "Let's think of something else," or "I don't see any sense in that."

Making balanced criticisms.—Although it is not possible to agree at all times, it is possible to accept the truth that does exist and then include that truth within the larger truth that should be recognized. Teachers can use balanced criticism. They can say, for example, "Your idea is good, John, especially in this connection though you might find it hard to use elsewhere." On a theme a teacher might write, "Your introduction to the argument is so clear that I feel the argument itself could also be stated clearly."A negative response may sometimes be withheld by saying, "Let's wait just a few minutes and see what conclusion we come to after all the facts are in." The "yes-but" response is to be avoided. Pupils as well as adults recognize quickly the disagreement and prefer out-and-out responses.

Showing affection and protecting.—Affection is expressed in many ways too subtle to itemize. It is shown by denying one's own desires or preferences in favor of another's and by doing and thinking things in common. It should be recognized, however, that many persons show affection in negative ways. Some, for example, show affection by sarcasm. It is a device much used but much misunderstood; for, even among adults, sarcasm has a negative stimulus value. Among children whose experience is meager, sarcasm is rarely understood as an expression of good will or affection. Affection is also shown in acts of protection. Occasionally a teacher may turn a joke on himself in order to relieve a pupil from ridicule. He may help the child to save face in case he has done something wrong.

Praising. — Whenever possible, pass on the praise. Many teachers use praise as the main device for spurring pupils to greater effort. They avoid finding fault and criticizing by simply withholding praise. They are careful not to give praise where it is not earned, but they are constantly on the lookout for opportunities to encourage achievement by praising merit. In dealing with pupils who have not achieved merit, withholding praise becomes a more effective device than finding fault.

Understanding and forgiveness.—It is helpful to the adolescent to

realize that his teacher understands why he is what he is and why he does what he does and that this understanding will not detract from his status with the teacher. Positive behavior is reflected in forgiving as well as understanding; both spring from affection or interest in the other fellow. Teachers who forgive pupils readily are likely to regard mistakes as things in themselves to be disapproved of, rather than as symbols of a whole personality in the wrong. If they lay blame, they blame the act and its causes. They do not hold a grudge. They give youngsters the feeling that there is another chance.

Positive and negative responses among pupils.—Teachers are interested in detecting these in pupils because they serve as keys to understanding. Pupils continually give cues as to their acceptance or rejection of one another by the positive and negative things they say and do. For example, selfinterest, rather than interest in others, is basic in such remarks as, "You can't tell me!"; "I know better"; or "You don't know what you're talking about." Pupils who respond with these words are not positive and, as a rule, will not be found to have leadership strength or social influence; neither will they have many friends. On the other hand, pupils give cues to their acceptance of others by positive behavior when they say, "Show me how you do it"; "What do you think?"; or "I'm right with you on that." These youngsters are likely to carry weight with their fellows and, like teachers who continually use similar positive techniques in the classroom, will be effective in interpersonal relations.

One caution should be mentioned. The cues to positive behavior which have been isolated for this discussion should not be regarded as a group of reactions which, if practiced, serve as an open-sesame to perfect human relations. If it is possible to employ positive responses and to avoid using negative ones, at the same time supporting these actions with the whole personality so that the visible act and the inner motivation thereto are one and the same, then improvement in personal and social relationships will surely result.

[*John B. Geisel is Director of the Orthogenic School and an instructor in the Department of Education at the University of Chicago. Reported from the* School Review, LII *(January, 1944), 41-46.*]

HOW TEACHERS CAN IMPROVE THEIR TESTS

MAX D. ENGELHART

In the Chicago Schools Journal

THE chief function of a teacher is that of directing and motivating pupils toward the attainment of desirable educational objectives. In the performance of this function, testing can play a very important part. When objectives are adequately defined and tests devised which are valid with respect to them, the extent to which objectives are being obtained can be measured. Furthermore, such tests define the objectives for the pupils and motivate the pupils toward them. When the results of such tests are adequately analyzed and interpreted, the teacher obtains a means of better orientating instruction and the pupils secure motivation through knowledge of progress.

Instructional objectives are most usefully defined in terms of observable behavior. Each specified objective should be an answer to the question, "What can the pupil do as a result of instruction?" Instruction which produces the abilities to do certain things should concomitantly develop the attitudes, interests, and ideals which motivate their doing. Instead of the general and intangible objectives "good citizenship," "appreciation of good literature," and "scientific methods," specific objectives formulated in terms of observable behavior may include: "presenting arguments in support of the elimination of the general property tax based on factual evidence critically analyzed and evaluated," "selecting a short story for leisure reading on the basis of the following criterions, . . ." "rejecting a conclusion which goes beyond the data." Many instructional objectives must be concerned with factual information, or knowledge. But information which makes no recognizable contribution to worthwhile thinking or further learning is not worth teaching. It is also not worth testing.

In writing true-false exercises certain precautions should be observed. Broad generalization should usually be avoided. Such words as "always," "never," "none," "only," "all," and "every" are obvious clues to the falsity of certain statements when the pupil can readily think of exceptions. On the other hand, the statement "all echinoderms live in salt water" represents a difficult true-false item to one whose biological knowledge is not extensive. In writing multiple-answer exercises the correct completions should not be too obviously incorrect. It is frequently effective to write multiple-answer exercises in which a "best" rather than a "correct" answer is called for. If the teacher desires to measure how well pupils can handle questions involving thought rather than memory, an exercise must constitute a novel

problem. It is not necessary to construct exercises involving complex directions in order to obtain such measurements — of discriminative thinking, for example,

Let us suppose that pupils in physics have been taught certain facts pertaining to sound and, at a later date, certain facts pertaining to light. Let us suppose further that the teacher has not stressed the similarities and differences of sound and light phenomenons. The good teacher would probably stress these things, but for the sake of our illustration, let us suppose that this is to be postponed until the test has been given. If this has been the case then the following series of exercises should involve discriminative thinking and, as this thinking is taking place, require a synthesizing of knowledge by the pupil:

On the line preceding each of the following items write the letter
A if the item is true of sound
B if the item is true of light
C if the item is true of both
.....Its velocity in water is greater than in air.
.....It can be reflected.
.....It can travel through a vacuum.
.....It can be refracted.

A number of examples from various fields of this very useful type of exercise follow. In each case only a few of the items are listed.

In each situation below, an individual or a group of individuals is seeking protection or assistance. On the line preceding each of the following items write the letter
A if the federal government is responsible
B if the state government is responsible
C if both governments are responsible
D if neither government is responsible
.....The New York Life Insurance Company wishes to open up agencies and sell insurance in Oregon.
.....Mr. Jones receives in payment $1000 in bills which he presently learns are counterfeit.
.....A Chicago visitor from Fort Wayne, Indiana, suffers severe injuries when his car is wrecked because of defective pavement on 76th Street.
.....Convicts escaped from Joliet Penitentiary arrive in Des Moines, Iowa, hold up a bank, and are seized and held by the local authorities.

On the line preceding each of the following items, write the letter
A if the sentence is fragmentary
B if the sentence contains a comma fault
C if the sentence contains a dangling modifier
D if the sentence exemplifies lack of parallelism or faulty parallelism
E if the sentence is correct
.....One day I feel as though I could lick the world, the next day I feel like a swatted fly.
.....Upon returning from the store, my homework requires my attention.
.....As we walked along the hall, where a large photograph of Roosevelt hung.
.....All of the boys being gone, most of the manual labor was done by the girls.
.....Bemoaning her stupid lot, the Army and Navy claimed all of her friends.
.....A freshman learns to study with regularity, to play with enthusiasm, and cooperation.

The same form needs only slight

adaptation to be useful in writing chronology exercises in history, or in measuring the way in which pupils handle correlated or cause-and-effect relationships. An example of a chronology exercise follows.

On the line preceding each of the following paired items write the letter

A **if the event in Column I occurred before the event in Column II**

B **if the event in Column II occurred before the event in Column I**

C **if the events occurred at approximately the same time (within about a year of each other)**

Column I	Column II
.....Clayton Antitrust Act	.....Sherman Antitrust Act
.....Alabama Claims Case	.....Venezuelan Arbitration
.....Dred Scott Decision	.....Fugitive Slave Act
....."Wigwam Convention"	.....Fort Sumter fired upon
.....Etc.	

It should be mentioned that there should be some relationship between the paired events significant enough to warrant their being paired.

The ability to read intelligently in a field is an important general objective and more efforts should be made to measure how well pupils can perform this activity. A teacher could present a graph and test, by the foregoing device, what information the pupils have gained in reading it. Or one may use paragraphs drawn from texts other than those studied by the pupils and even from advanced texts if the teacher wishes to challenge the pupils. When paragraphs are selected they should be selfcontained in that the topic is treated fairly completely.

The preparation of exercises of the type described is difficult. When a teacher has written such exercises it is essential to secure careful evaluation by other teachers who have the same general objectives. The best evaluation is done when the evaluating teacher does not have access to the key, but answers the items herself. Comparison of several such evaluations is valuable in the rejection of bad items and in the revision of others. For example, in a biological science examination the students were asked to mark certain items true or false on the basis of "principles of inheritance." The following item was accepted as false by several biological science instructors: "Boys tend to resemble the father, while girls tend to resemble the mother." However, one instructor pointed out that in a certain important respect boys always resemble the fathers and girls always resemble their mothers. In the directions preceding the items the following qualifying phrase was added to take care of the situation: "excluding primary and secondary sex characteristics."

The preceding paragraphs have dealt exclusively with objective exercises. In any balanced program of testing some essay exercises should be included. In writing such exercises "fact" questions should be avoided. Essay exercises should rep-

resent novel problematic situations. Information is needed for the writing of a correct response to exercises which are thought questions or novel problems, but the quality of the response will also depend upon the extent to which the student critically analyzes the situation and thoughtfully organizes his information in an effort to meet it. The scorers should be sensitive to more than the correctness of the information presented by the student. Their rating should be based not only on the correctness of the facts, but also on evidences of superior selection, evaluation, and organization of the facts presented.

After a test has been given and scored, the test data should be subjected to analysis. Analysis is essential if the teacher is to know the extent to which objectives are being attained. It is also very desirable to determine the percent of correct response to each exercise for the group taking the test. In some cases low percents of correct response may warrant the rejection of such items for use in testing subsequent classes, or the omission of such subject matter as inherently too difficult. The analysis may be extended further than merely determining percents of correct response. One can, with a little labor, determine how well each exercise correlates with whatever is measured by the test as a whole. Low or negative correlations most often indicate that an exercise is bad. Or it is possible that the exercise is measuring some trait which is worthwhile in itself, but which is not related to whatever is measured by the test as a whole.

Such analysis may seem to be carrying the "improvement of tests" a bit too far for the classroom teacher. It may seem that an inordinate amount of work and cerebration is involved. If, however, teaching is as much worth doing as the producing of manufactured articles or materials where the processes are controlled from stage to stage, then the labor involved is more than justified. The teacher who is willing to do these things will find that the "improvement of tests" is not merely that. It is also the improvement of teaching.

[*Max D. Engelhart is a member of the faculty of Chicago City Junior College. Reported from* Chicago School Journal, *XXV (September-December, 1943), 16-24.*]

THE WOGS is a new organization of former women teachers who have returned to teaching. Letters stand for "We Old Gals Survive," according to the *Michigan Education Journal.*

WHAT THE WELL-DRESSED SCHOOL WILL WEAR

WILLIAM DOW BOUTWELL

In National Parent-Teacher

ARE you still thinking of education as a teacher plus 30 pupils plus books plus a bank of windows letting light into a classroom? If that is still your idea, you are likely to have an argument with the boys coming back from service. They know about the modern tools of education. They know how much faster and how much more easily one can learn from films. They have learned languages from records. Microphones and public address systems are as much a part of their lives as telephones are of yours.

Our armed forces are in a hurry to win the war. To train men in a hurry, the Army and Navy have sought new tools of learning. They give a four-year course in Japanese in 13 weeks. They raise an illiterate soldier to fourth-grade efficiency in reading and writing in 10 weeks. Our schools continue to measure learning in semesters, the Army and Navy measure learning in hours. Of course, knowledge of factual information or skills is but one face of the gold coin of education. Schools also must supply the atmosphere in which youth can mature—a process that cannot be hurried. Nevertheless, much that will make the school of tomorrow modern can be found in the training camps of today.

What of this school of tomorrow? How will it teach? What will the well-dressed postwar school wear?

Here is a suggested list. It is not merely a list of equipment, because equipment without teachers trained to use the new tools of learning simply wastes good money. If your school has a majority of the following, your children are indeed fortunate. If your school falls short, you can help lay plans now for reequipping and restaffing after the war.

1. *Teachers* who are not frightened by a motion-picture projector or a radio playback and *student assistants* who have been trained to operate and care for equipment.

2. *A new school schedule* that abandons the old educational shibboleth that a class consists of one teacher and some 30 to 32 students. In the Army, the teacher-student ratio ranges from one teacher with one or two students to large groups of 100 or more. Physical training, Morse code, and education about war aims are taught to large classes; difficult subjects, such as language and the operation of combustion engines, may be taught in very small groups. If we make proper use of films and radio for mass training in subjects that lend themselves to such treatment, we can recapture the intimate teacher-student relation implicit in that famous definition of a school, "Mark Hopkins on one end of a log and a student on the other." New tools of

learning will not eliminate the teacher; they will save his time for the more difficult and more demanding tasks of education.

3. *Simple provisions for darkening all classrooms* for the frequent use of films and slides.

4. *Electrical outlets* conveniently placed at the front and rear of all classrooms.

5. *Portable 16-millimeter sound-on-film projectors.* In a school making full use of visual aids, the ratio might well be one projector for every two classrooms.

6. *Radio receivers for every classroom.* Not $15 receivers donated by well-wishers but A-M and F-M receivers with speakers adequate for classrooms and with pushbutton automatic tuning.

7. *Portable radio playbacks* capable of playing 16-inch transcriptions or 12-inch records, 33 1/3 RPM or 78 RPM.

8. *Film-strip projectors*—approximately one for every two classrooms.

9. *Public address equipment* serving all classrooms, auditoriums, gymnasiums and playing fields.

10. *A central F-M radio station,* owned and operated by the school board, serving all schools in the system with educational programs.

11. *Mirrorphones* employing metal wire or tape for instant playback of voice, orchestra, or chorus. Mirrorphones will be indispensable for speech and language teaching.

12. *Libraries,* larger than the present ones and very different. More room must be provided for the new teaching aids.

13. *Laboratory workshops,* adjacent to the library, for the repair of equipment and for making of new transcriptions, films, and charts.

14. *Listening tables or soundproof listening rooms* where students can hear recorded music or transcriptions.

15. *New charts and pictographs,* including overlay charts that give incisive facts about a given situation.

16. *Television receivers* (eventually). Current experience points to television as potentially a more effective aid to education than radio.

[*William Dow Boutwell is Director of Information and Radio Service of the U. S. Office of Education. Reported from* National Parent-Teacher, *XXXVIII (January, 1944), 27-28.*]

ESTIMATES just made by the U. S. Office of Education of the effect of the war on the schools show 546,000 fewer boys of age 15 and over in school this year than last.

REMEDIAL ARITHMETIC IN HIGH SCHOOLS

GLENN MYERS BLAIR

In the Mathematics Teacher

IT is scarcely necessary to remark that many pupils in high school are found who are deficient in the fundamentals of arithmetic. Some do not know the primary facts of addition, subtraction, multiplication, and division, to say nothing of such advanced processes as simple fractions. Secondary schools once took the position that it was the duty of the elementary schools to teach the basic facts of arithmetic. However, the increasing numbers of pupils arriving without this knowledge has created such an acute problem that many schools have felt the need of setting up remedial instruction in arithmetic.

During a study made to discover outstanding remedial programs operating in senior high schools, the writer, in 1940, conducted a nation-wide survey. Among the questions asked of 1090 principals was the following: "What provision do you make for pupils who are deficient in the fundamentals of arithmetic?" Replies were received from 379 schools. It is evident from the reports received from 166 schools describing the work being done in their schools in remedial arithmetic that increased attention is being given to organizing programs which will care for those children at the high-school level who have failed to master the fundamental processes of arithmetic. The modern secondary school is obviously striving more and more to meet each child on his own ground — to take him where he is, and from that point to assist him in advancing toward greater competence in the use of the essential tools of education.

Of the various plans in use for caring for pupils deficient in the fundamentals of arithmetic, those labeled "remedial arithmetic classes" are among the most common. In many cases, pupils are selected for these classes at the time they enter high school and in some cases before that time. Scores on tests, or grades made in arithmetic in the elementary schools and the opinions of the elementary school teachers are also frequently considered. Practice varies as to the length of time pupils remain in remedial arithmetic classes. Many schools require attendance for a full semester or year, while others expect the pupils to attend only a few weeks or until they show sufficient improvement to enter the regular classes. Some schools admit pupils to the regular algebra classes and then after a test period of a few weeks remove those who are deficient in arithmetic and place them in special classes where they are taught the fundamentals they need. Most of the teach-

ers of these classes gear the work to the interests, needs, and maturation levels of the pupils in such classes. An Omaha school reports, "At present there are from 300 to 400 students who pass through this course each year. Special Math was developed to meet the actual needs of students. Therefore it starts as low as fifth-grade arithmetic and goes through to advanced high-school arithmetic."

Work in remedial arithmetic is handled by many schools through classes known as general mathematics or applied mathematics, practical mathematics, or everyday mathematics. The content of such courses varies with the different schools, but practically all make provision for work in the fundamental processes of arithmetic. A Chicago teacher says, "These General Mathematics classes are preparatory to the work in algebra for students with arithmetic deficiencies," and a Milwaukee school, describing its similar course reports, ". . . the major part of the course deals with mathematics (mostly arithmetic) applied to personal, home, and community situations and exemplified in measurements, budgets, scale drawings, percents, insurance, graphs, money, taxes, buying, selling and simple statistics."

Realizing that knowledge of the fundamentals of arithmetic is essential for success in adult life, a number of schools have set up arithmetic classes for those high school seniors who are about to graduate and who have as yet failed to master these fundamentals. Such classes are usually called senior arithmetic or arithmetic review. Selections usually are made on the basis of tests. A California school reports, "Seniors found deficient in arithmetic through use of a standardized test are required to take a six weeks' review of these processes without credit and must pass with a minimum standard to be eligible for graduation," while a Baltimore school reports, "We have remedial arithmetic classes for twelfth-grade students who fail to make 80 percent in a test on arithmetic fundamentals. As soon as pupils are able to pass such a test, they are excused from further attendance in the class."

Although not labeled remedial, much remedial work in arithmetic is frequently carried on through courses designed as commercial arithmetic, business arithmetic, and shop arithmetic. For example, in Castlemont High School, Oakland, California, "students who are poor in arithmetic may elect business arithmetic." At the Santa Barbara High School, students sign up for "Commercial Arithmetic" if their arithmetic standing is below the 30 percentile on the Progressive Achievement Test in Arithmetic.

Commenting on remedial arithmetic offered through its special curriculums for students of low IQ, the

South Philadelphia High School for Girls reported, "Here we endeavor to maintain no particular standards but meet the pupils on their level even if it happens to be third or fourth grade." The Langley High School in Pittsburgh includes in its class for "all children who are at least two grades retarded, at least two years overage, and whose IQ's are below 80" work in "basic essentials in arithmetic." The teacher of these children uses a book of "practical problems in arithmetic" but finds much of the material "so above the heads of the children that I shall have to find more simple material for next year."

Some schools try to handle the problem of extreme retardation in arithmetic through the regular mathematics. The following quotation illustrates this practice: "We have no special classes for remedial work in arithmetic. The various handicaps are diagnosed by the teachers of mathematics and remedial work is applied in the regular classes. In addition to such work, many teachers give assistance to pupils who are deficient in arithmetic during open periods or before and after school hours. Schools using such techniques, as a rule, stated their dissatisfaction with the results and expressed a hope that more specific and better organized work might soon be initiated.

Glenn Myer Blair is a member of the faculty of the College of Education, University of Illinois. Reported from the Mathematics Teacher, *XXXVI (December, 1943), 346-50.*

On the Fence

THE Institute of Student Opinion, sponsored by *Scholastic Magazine,* recently asked 130,000 high-school students: "Are you in favor of a year's compulsory military service by 17- to 21 year-old boys after the war?"

About half the boys said they favored such service; 45 percent objected to it; and the remainder had no opinion. The girls didn't like to see their brothers serve a full year. Fifty-nine percent of those questioned rejected the idea; 31 percent of the girls liked it; the remainder had no opinion. A bill calling for a year of military service by boys is now pending in Congress.

A recent Gallup poll on the same question showed 63 percent of those queried in favor of the proposal; 29 percent against it; and 8 undecided. Men and women were equally in favor of the plan.

THE SCIENCE TALENT SEARCH

HAROLD A. EDGERTON AND STEUART HENDERSON BRITT

In Occupations

THE primary aim of the annual Science Talent Search—now in its third year—is to locate those boys and girls who seem to have the requisite aptitude and interests to become first-rate scientists. Carried out by Science Service from Washington, D. C., it is arranged as an activity of the Science Clubs of America. The entire program, including the awards to winners (trips to Washington for 40 and scholarships for the best of this group) is made financially possible by the Westinghouse Electric and Manufacturing Company. The Science Talent Search uses the "successive hurdles" technique in making its selections. A science aptitude examination, the high-school record, score on recommendations furnished by the high-school teachers, and the rating on an assigned essay are the first four hurdles. The 40 "survivors" win a trip to Washington where they are interviewed and take another test, differing from year to year, designed to measure some competence not measured by the first devices.

Vocational guidance of prospective scientists involves the recognition of aptitudes, interests, training, personality, and vocational, and avocational experiences, which are related to one or more occupational fields called "scientific." It means not only the identification, but possibly the creation of more "earmarks" where some of those less modifiable by training already exist. From the point of view of the Science Talent Search, it is necessary to know the "earmarks" of such persons, before they become scientists. Our picture of the potential scientist suggests a person who is intellectually quite superior, interested in science, and a leader among his fellows. Potential scientists must be "bright" and able to do high quality academic work. They should have shown by their records a strong interest in science both in and out of school. In addition, they should have exhibited over a period of time considerable resourcefulness, initiative, and social competence.

Thus the recommendations for those contestants who survive the second hurdle have great importance. They must be specific; a "general" recommendation is relatively useless. In the scoring such statements as "Mary has shown a high degree of cooperativeness," or "John is really resourceful," receive scores of zero. There are ten trait families about which the Science Talent Search seeks detailed and specific evidence in considering potential scientists. A score of *one* is given for each trait or trait family for which there is concrete and objec-

tive evidence—something done—to demonstrate competence in the trait and the total number of traits given a score of *one* represents the recommendation score. The list of trait families used follows:

1. *Attitude—Purpose—Ambition.*—Does the student have a purpose and a program? What is this program and where is it likely to lead? Is it compatible with his abilities, interests, and previous experiences? Would he carry his program through in spite of difficult circumstances?

2. *Scientific Attitude.*—What has the student done to demonstrate a scientific attitude? Has he designed an experiment by himself? Does he "jump to conclusions?" Is he objective about most situations or does he react emotionally? Does he discriminate between pertinent and nonpertinent evidence in solving a problem? Does he "try it and see?"

3. *Work Habits.*—What has this student done or failed to do which demonstrates the quality of his work habits? Does he attend to details, finish his work on time, stick to the task until it is finished, work steadily at an assigned job?

4. *Resourcefulness.*—What has he done to show his resourcefulness? Has he let failure stop him? Is he able to adapt his ideas and materials to new situations? Does he always follow "the way it was done by others?"

5. *Social Skills.*—Does he have the ability to direct others, to gain the whole-hearted cooperation of students and associates, to make a favorable impression on persons he meets? What has he done by which you could judge his social competence?

6. *Cooperativeness.* — In what ways has the student worked well with others, contributed ideas, done his share of work, listened to suggestions and ideas of classmates?

7. *Initiative.*—Has he introduced new ideas and new ways of approaching problems? Is he a self-starter? What has he done to show his initiative?

8. *Responsibility.* — Can he be trusted with money, property, and confidential information? Can he be depended on to complete a task? What has he done to demonstrate his ability to take responsibility?

9. *Mechanical Ability.* — What can the student do with tools and machines? What devices or apparatus has he constructed? What experience has he had with mechanical things: Can he plan as well as construct apparatus and devices?

10. *Special Abilities.*—What are his most outstanding traits? What special abilities and skills has the student demonstrated which will help him in making contributions to science?

Anecdotal records, of the kind desired in the Science Talent Search, can be of great value in a counseling program regarding a student's potentialities in any field of endeavor, or in estimating the adequacy of the

extracurricular program of the school. The kinds of evidence of competence sought by the Science Talent Search are those used by the U. S. Employment Service offices in classifying inexperienced workers. They make use of aptitude test scores, and such evidences of interest, competence, and personality as are reflected in hobbies, recreations, likes and dislikes, and achievements in school subjects and extracurricular activities. Vocational counselors will find this kind of information of value in dealing with many postwar counseling problems. Soldiers will return who have had no civilian work experience, or who want to change to a new field. With manpower shortages, job getting is relatively simple; but as business and industry return to peacetime operation, workers and prospective workers will need to consider more carefully their qualifications for training, particularly the factors of potential job satisfaction as part of their pattern of living.

[*Harold A. Edgerton is Director of Occupational Opportunities Service, Ohio State University and Steuart Henderson Britt is Lieutenant in the U. S. Naval Reserve. Reported from* Occupations, *XXII (December, 1943), 177-80.*]

What Americans Are Reading

THE annual year's end survey of reading interests among users of the nation's public libraries shows an almost universal drop in reading. Out of 120 public libraries responding to a questionnaire sent out by the American Library Association, 110 indicated that people are not reading as much in wartime as before the war, although the quality of what they read is improving. The questionnaire went to about 200 libraries reaching a cross-section of the country's population in large cities, small towns, suburbs, and rural areas. The reading which has lost its popularity is the "thistledown" kind—light novels and nonfiction read purely for entertainment.

Practical reading has also decreased in volume, but intensified. At the beginning of the war, demand soared for books on job-training and conversion of industry. As industry's own training program became more efficient, and as industrial conversion has become more complete, this call has fallen off, and is now almost back to normal. In its place is a sustained demand for answers to technical questions which require research and often highly specialized book collections.

THE STUDENT TEACHER'S SPEECH

D. W. Morris and Alan W. Huckleberry

In the Quarterly Journal of Speech

In a teacher-training institution a department of speech has a dual responsibility. Not only should it provide a program of preparation for teachers of speech and for those who major in such fields as English or social studies and wish to take some work in speech, but it should concern itself with the speaking ability of *all* prospective teachers because the teacher's speech is an important functional tool. During recent years ratings have been obtained from approximately 1000 public-school teachers indicating the percentage of total classroom time consumed by the teacher's talking. These selfratings range from 20 to 95 percent with the average well above 50 percent. (It is our opinion that this is not indicative of progressive teaching technique! Nevertheless the condition does exist.) Since teachers do talk, on the average, more than 50 percent of the time they are in the classroom, the manner in which they talk is important and should be a primary concern of the department of speech in each teacher-training institution.

A minimum speech program for the classroom teacher should answer three needs: (1) general proficiency in speech sufficiently developed to allow for an application to the demands of classroom teaching, (2) sufficient knowledge of speech development in children so that the teacher will understand the speech problems of her students and sufficient acquaintance with speech techniques such as classroom dramatics, discussion forms, etc., so that the teacher will be able to use these techniques as instructional tools, and (3) a specific application of speech skills to the classroom teaching situation. The first two needs can be met through courses taken by the teacher. However, if we really are to meet the third need we must go from our speech classroom to the public-school classroom where the practice teacher is facing children to teach them. There we must appraise the teacher in the actual teaching situation and seek solutions for his inadequacies.

During the past year and a half, in an attempt to make college studies applicable to a practical situation, Indiana State Teachers College has brought the speech staff and the experience of the practice teacher more closely together. The speech instructor first visited the classrom while the student was teaching. Following this came a conference with both the student and critic teacher. The items checked during the observation were voice quality, loudness, pitch level,

timing (or rhythm), inflection, articulation, pronunciation, poise, posture, and conviction. During the conference period these same fundamental items were checked more carefully and in a more objective manner. This was especially true with pronunciation and articulation. For a careful check of these two the student was asked to read a prepared paragraph which was "packed" with words commonly mispronounced or misarticulated in this area of the country.

After the testing period was completed, the speech instructor arranged a joint conference with the critic teacher and the student teacher. The instructor handed copies of the diagnosis check list sheets to the two teachers, explaining the strong points of the student as well as listing those that needed improvement. These sheets were used as a study guide and as a check on improvement. If there were no serious weaknesses and if speech errors were found that could be easily remedied, the instructor offered suggestions to both critic and practice teacher in the conference. If need for more time was indicated, arrangements were made for additional conferences or clinic work.

The third step in the improvement phase was the retest after the student had finished his practice teaching period. Held in the presence of the critic teacher, this test rechecked qualities found to be weak on the first test as well as the other items to see if regression existed. The final check list, charting where the student started, how much he improved, and where he ended, was made out and filed.

All of this started as a teacher improvement project. While records were kept, a study of results made, and tentative conclusions drawn, the reports are those of an educational project and not a research study. A control group would be needed to make this a true experiment. Nevertheless this service in the interest of better teachers should (1) improve the special courses offered in the college curriculum, (2) refresh the student on the aims and techniques of good speech in a practical situation, (3) make for better student teaching, (4) develop, through imitation if not through trained guidance, better speaking habits in the students of the student teacher.

D. W. Morris is Chairman of the Department of Speech at Indiana State Teachers College, Terre Haute. Alan W. Huckleberry is Director of the Speech Clinic at Ball State Teachers College, Muncie. Reported from the Quarterly Journal of Speech, *XXIX (December, 1943), 485-89.*

WHY TYPE SLOWLY—EVER?

MARGARET E. COLESWORTHY

In the Journal of Business Education

TYPING can be taught in much less time than has been required in the past through use of the "speed approach." Results have been so promising that one may ask, "Why teach typing slowly—ever?" Dr. E. G. Blackstone, who originated the method called "speed typing," says it is as reasonable, psychologically, that speed may be developed first and accuracy developed later, as it is that accuracy can be developed first and speed later—and it's lots more fun. Most other skills are taught with the expectation that they will be inaccurate in the beginning.

In the speed approach, the students are urged to type rapidly—40 words a minute or more, on the very first exercise. They are given only four keys to learn on the first day —*h, e, t,* and *r,* keys that are frequently used and that permit the typing of many real words. Short sentences and phrases are presented, even on the first day, thus arousing far more interest than can be developed by nonsense syllables or single words. On each succeeding day, one single new key is added with abundant review of each previously taught key, to build up and increase the control of those keys. Capitals and periods, taught in the second day's work, permit the typing of real sentences.

A distinct departure from other methods of teaching typewriting is the presentation of the first line of typing on each new letter by the sight method. The student is asked to look at the keys and at his fingers so that he may secure exact and accurate mental pictures of the distances and the directions between keys. After one line has been typed by the sight method the student is challenged to type it by touch, and most of them find it easy to do so.

In the speed approach, emphasis is on fast stroking. Methods of reaching to the upper and lower rows of keys that avoid waste motions are used. Keys from all rows and columns are presented rather than from one row or one column at a time. No adjacent keys are taught on consecutive days, and keys struck by the same finger of the other hand are taught on widely separated days. Reviews are given if, at any time, the students seem to be confused and seem to need more practice on a previous lesson. The material used is carefully chosen to provide ample review. Paragraph writing is introduced on the tenth day although all the letters have not yet been presented. Ingeniously constructed copy has been made that makes sensible contextual material even without the unlearned letters.

The teacher of this method can-

not be lazy. He must be actively directing the class all the time. From the first day, a great amount of the daily work is timed and for this timing a number of interesting devices are used. One is "calling the throw." The students attempt to type a 60-space line in 18 seconds, which is at the pace of 40 words a minute. Whether or not the student has completed his line, when the signal "throw" is given, he returns his carriage and starts a new line, attempting to finish it in 18 more seconds.

After the twelfth lesson, more attention is gradually devoted to accuracy. The student is shown how to keep an error chart to reveal any habitual errors he may have developed, and special remedial drills are given him for any that he discovers. Now when he types a new exercise for the first time he watches for h a r d spots — a combination that causes him to make an error or to slow down. He then practices on the hard combinations until he can finger them correctly and rapidly.

At Dorsey High School, where this method was used, the keyboard was well mastered in eight weeks. In one class of 40 there were 25 boys, many of them seniors who expected to enter the armed forces soon. They made rapid progress, were delighted to have an opportunity to learn a skill that might be highly useful to them, and agreed that "typing is fun." By the end of the 20-week semester the classes had attained a median speed on 10-minute tests on new matter of between 30 and 40 words a minute with a maximum of five errors. Many students wrote perfect 10-minute tests.

Attaining speed early in the course, as these students did, gave the classes time to study all types of business letters, centering, tabulating, addressing envelopes, and care of the typewriter. At the end of 15 weeks the classes were far ahead of the usual class at the end of 20 weeks. Members of the classes were confident that with their speed and accuracy they could obtain and hold a summer job as typists and many had already found positions by the time summer vacation started. Note that this was at the end of one semester of typing—not two, three, or four semesters.

Typing can be taught in much less time than has been required in the past. The speed approach looks very promising and perhaps justifies the title of this article.

[*Margaret E. Colesworthy is a teacher in Dorsey High School, Los Angeles, California. Reported from the* Journal of Business Education, *XIX (December, 1943), 18-19.*]

THE ARMY PROGRAM FOR ILLITERATES

MAJOR PAUL A. WITTY and CAPTAIN SAMUEL GOLDBERG

In the Elementary English Review

TO help meet the country's manpower problem, the Army found it necessary to accept for military service many illiterate, non-English speaking, and educationally retarded men. These were assigned to Special Training Units, whose mission is to provide preliminary training through which such men will attain the required academic and military proficiency which is essential to proceed with regular basic training. The Army's program of special training has proved highly successful. Most of the men in these units have acquired sufficient skill in language, arithmetic, and preliminary training to be able to proceed with regular training. Thus, the Army is doing its share in helping to meet the manpower problem. However, it is doing more. It is demonstrating the possibilities inherent in a sound program of adult education. Application of a comparable program in postwar America should help to remove illiteracy as a national problem.

The program of training in Special Training Units is organized to cover an 8-12 week period. Eighteen hours a week are devoted to reading, language, and arithmetic, and the remainder to military subjects. The time spent by a man in a Special Training Unit serves both as a period of preparation and exploration. On the one hand serious efforts are made to equip him for the pursuit of regular basic training and Army life generally. On the other hand he is studied carefully to ascertain whether he has the capacity to maintain himself and perform some useful job in the Army. The Special Training Units not only prepare men for more direct and effective discharge of their duties but help to make them more cheerful and better adjusted soldiers.

Considering the urgency of the general military situation at the time America entered the struggle as an active belligerent and the extent of the mobilization program undertaken by the Army, it is surprising that effort should have been made to introduce a well-rounded system of instruction in Special Training Units. Yet, judged by usual criterions which may be set, study of the Army's program of instruction reveals a broad constructive approach which incorporates many desirable educational features. Some characteristics of the program follow.

1. *Classification of students.* — The men assigned to Special Training Units are studied individually. Information pertaining to the soldiers' past school attendance, occupational history, avocational interests, and intellectual abilities is avail-

able on their soldiers' qualification card which is completed by the time they reach the Special Training Unit. There each man is tested for placement purposes to determine to which of four possible groups he will be sent. The levels of these groups are roughly equivalent to the first four years of elementary school instruction. Classification of students in Special Units is a dynamic process in which every effort is made to place the student correctly, analyze his needs, record his accomplishments, and advance him in accord with his ability to assimilate newer material.

2. *Subject matter and methods.* — The material which has been prepared for the classroom is highly functional in character. It deals with episodes and experiences which are an outgrowth of the man's life in camp and the Army. It presents the issues and progress of the war in language the men can comprehend. Thus, it represents a fulfillment of needs and interests. It is well graded and so correlated that instructors can easily integrate their instruction in one area with that of another.

A particular method of instruction is not prescribed for use in Special Training Units. For example, in the field of reading, teachers are provided with instructional guides which utilize several different approaches. They are then permitted to select those methods which will best meet their needs. The material furnished is highly diversified and richly illustrated. Many film strips and other visual aids have been prepared to facilitate learning of difficult subject matter. The approach to reading represents an incorporation of the best features of different methods which have been recommended over a period of years by competent educators. A basic stock of sight words is taught first. This is presented through the medium of a film strip, in which 46 basic words are associated with their pictorial representations. The acquisition of this basic stock of sight words is facilitated in many ways and all efforts are directed toward building up rich associated meanings for each word and toward developing the ability to recognize words at sight from their general configurations. Through the administration of a simple test, the teacher is able to select those men who are ready to proceed with the *Army Reader*. The *Army Reader* presents "Private Pete" in four graded sections, through very simple to more complex soldier experiences, through words, phrases, and short sentences, to complete reading episodes.

Through various types of materials, such as a weekly paper and a monthly magazine, students are taught to read for details, to follow directions, and to acquire the central thought of a passage. A recent publication, *Teaching Devices for Special Training Units,* describes many aids and games which instruc-

tors can employ in the teaching of reading, language, spelling, handwriting, and arithmetic. Diagnostic and remedial procedures and methods for each of the subjects are presented.

3. *Method of dealing with individuals who experience difficulty in learning.* — Students who experience great difficulty in learning are carefully studied. The teacher consults with the personnel consultant. If, at length, following tests and interviews, it is decided that the man is inept and uneducable, arrangements are then made for a Board of Officers to meet to consider the desirability of his discharge from the Army. The approach to the individual is positive and constructive.

4. *Teacher selection, preparation, and supervision.*—Individuals chosen as teachers are carefully selected. Many have had college training and previous teaching experience. Many of the teachers have the Master's degree and some have received the Doctor of Philosophy degree. Instructors are selected not only on the basis of their academic qualifications but also in consideration of their interest in and ability to handle slow-learning individuals.

Once selected, teachers in many units are prepared for their work through local training conferences. The local training conferences are modeled after the two national training conferences which were conducted by the Development and Special Training Section, Training Branch, A. G. D. Representatives from each of the major units attended the national conferences and then returned to their own units to initiate improved teacher training. A program of teacher supervision is in operation. Teachers are observed by the educational director of many units. Periodically, a supervisory "inspection" is made by representatives of the Development and Special Training Section under the supervision of the Training Branch, A. G. D. and the Director of Military Training, A. S. F. Recommendations for the improvement of a unit are contained in the report of the "inspecting" officer.

[*Major Paul A. Witty and Captain Samuel G. Goldberg are members of the A. G. D. Reported from the* Elementary English Review, *XX (December, 1943), 306-11.*]

THE U. S. Office of Education estimates that 7 percent of the teachers of the country hold only emergency teaching certificates.

NINE THINGS TEACHERS EXPECT OF THE PRINCIPAL

TRAVER C. SUTTON

In the Clearing House

INFORMAL meetings are usually unique and stimulating. They are unique because the talk never goes beyond conversation — and stimulating because steam is let off without causing trouble. I have been present at many such sessions of teachers — and it seems to me that things said about how principals should treat teachers might interest teachers in general and principals in particular. Teachers who have gone over this material, gleaned in these pleasant fault-finding conferences, think it is fine. Some good principals approve — and others think that I have accumulated a lot of bunk.

1. *Teachers do not like the ordinary teachers' meeting.* Suggestions are made that information obtained at teachers' meetings might be disseminated more quickly, more accurately, and far more economically by having it typewritten, mimeographed, or, in the case of a larger system, issued in the form of a teachers' house organ. It is evident that the polite silence maintained at most teachers' meetings is nothing more than a silence which hides boredom, resentment, and indignation. Here is one direct quotation on the subject, "I get the opportunity to admire my principal's voice as he reads aloud to us the mimeographed notes which we hold in our hands. Sometimes I get nervous indigestion due to rage at being treated like a moron."

2. *Every teacher desires to be noticed, to be important, to be considered as an individual.* This means that a principal should know the full name, should be familiar with the hobbies, and the personal interests of each teacher. In particular, teachers want their principal to know their educational background — if they have attended summer school, if they have written an article — and also they want their achievements discussed before the world. Teachers want to be appreciated. A good principal finds out the personal ambitions and characteristics of his teachers. He makes it a point to know and to remember who recommended certain teachers. He establishes a basis for mutual interest.

3. *Teachers dislike the principal who attempts in public to correct or criticize them.* A good principal can be pleasant even when a reprimand is needed. He can offer cheerful and constructive criticism and this can be done in private and with a spirit of friendliness.

4. *Teachers like to be praised.* They need it. Praise for work well done often means more to an older teacher than a raise in pay. Of course they would like it better if they could

receive the deserved praise *and* the raise in salary.

5. *Many principals are in constant danger of assuming that they are important* simply because they have been put in a supervisory position. Such principals like to impress teachers with the importance of administrative work. They are too often satisfied with their success and may be "riding for a fall."

6. *Little things and little actions on the part of the principals* may cause teacher-principal irritation. Teachers object to the principals' entering classrooms and rearranging books on a table — and they are resentful when a principal attempts to adjust the window shades.

7. *Teachers want their principals to be completely honest.* A teacher has the right to gossip — but a principal is not so privileged. If a principal tells a half-truth, or repeats rumors, he has destroyed his school's morale — for the reputation of a school can quickly be destroyed through such tactics.

8. *Teachers would like to have their principals remember* that just because a person has been elected or appointed to an executive position, he has not through some miraculous action been endowed with all the knowledge in the universe regarding every subject taught in the schools. Teachers are obstinate regarding this matter. They feel that they are experts so far as subject matter is concerned.

9. *In conclusion, we may say that teachers do not want their prinicpals wasting too much time* trying to figure out good alibis for the administrative errors they have made. Teachers like a principal who, having made a mistake, is ready to admit it. All teachers consider this ninth point important. They distrust the supervisor or the principal who feels that it is necessary for him to make it appear that he is never in error. Teachers will be loyal to the principal who is willing to realize that there is a lesson to be learned in every mistake. The administrator who does not see this is blinding himself to thousands of opportunities to learn important things that might make him a better principal.

[*Traver C. Sutton teaches science at Cass Technical High School, Detroit, Michigan. Reported from the* Clearing House, *XVIII (December, 1943), 208-9.*]

OVER 5000 school units in Texas are using broadcasts of the Texas School of the Air to supplement regular classroom instruction according to the State Department of Education.

THESE BOOKS WERE NEVER WRITTEN

HERBERT B. MULFORD

In the Phi Delta Kappan

EDUCATION basically is social policy and as such must have public government. This points to the school board as government. By and large, the school board has not matured, nor in one sense has it ever been permitted to mature. It has not had the very influence for which education stands—which is decent educational guidance. Something similar might have been said about the development of the city superintendent had not the teachers colleges and universities undertaken in some degree to train him. Now that the superintendent has been given something of a place in the sun, why not educate the school boards? There are more than 400,000 school-board members; they are citizens, transient and uncompensated in their work, but most of them are willing to learn what is rarely set before them, either in literature or example.

If one considers cutting across difficulties and attempts to solve the problem of educating the school board as it exists in reality, it must be through recognizing that the board members would improve themselves for the benefit of their schools if, for their bookshelf, (1) the material were brief; (2) if it were in convenient form, possibly of pocket size; (3) if it were subdivided in subject matter, so that one problem could be essayed at a time; (4) if it served boards specifically in a given state; and (5) if the administrator were to direct board attention to materials available and he himself were well enough informed to touch on the significance of the numerous issues which assail the thinking of board members. These considerations should not exclude regular subscriptions to the better educational magazines; indeed, it is assumed that specific and localized treatment of problems in education should go hand in hand with regular reading of periodicals in order to keep up to date.

In a layman's judgment, no greater contribution could be made than for serious students in education to take up various aspects of this needed pamphlet-writing in every one of the states. And guidance in such endeavors by professors of education generally would seem to be the impulse to such endeavors, though publicly announced policies in favor of such material by the U. S. Office of Education, the National Education Association, and all the state associations and other educational societies would give added stimulus. Following are some of the essentials: (1) A popularly written overview of public education in the nation and given state. (2) Digest of the salient points

of the state school laws. (3) A state handbook of school-board duties. (4) Digest of the specific taxation procedures of school districts of the state. (5) A pamphlet on the legal pitfalls of bad board minute-writing, with examples. (6) Comprehensive instructions for drafting budgets and appropriation ordinances. (7) A digest of salary schedule plans in use in many communities. (8) Treatise on short-term and long-term financing of schools, with a digest of procedures in commercial and investment banking and legal pitfalls therein. (9) Treatise on the school attorney, particularly in respect to his services when school taxes are attacked by property interests. (10) Digests on insurance liabilities and ideal outline of insurance coverages under the law. (11) Popular treatise on public relations. (12) Popular treatment of problems of buildings and grounds, with architectural suggestions. (13) A model for school district property inventories. (14) Treatise on type of bookkeeping and auditing required by the state laws, with contrasts of better practices elsewhere. (15) Comprehensive outlook on the broad problem of school district reorganization. (16) Description of system of pressure-group action for modifying or recodifying the state school laws. (17) Description of the work of the school business manager. (18) An outline of the meaning of institutions of higher learning and the distinctions between liberal arts colleges, technological schools, teachers colleges, and universities, including the controversies over college degrees—all as they bear on the lower schools. (19) Treatise on guidance, vocational training, occupational surveys, and their bearing on curricular changes. What are board responsibilities in these fields? (20) Popular information on services of universities in making school surveys for the guidance of both administration and school boards, to disclose shortcomings of the system and to suggest remedies. (21) Treatise on ways and means for selection of administrators, and the board's responsibilities in approving faculties and other staffs. (Many boards do not know that placement services are available from teacher-training institutions.) (22) Discussion on the meaning of the preponderance of women teachers. (23) Discussion on problems of school transportation, particularly in the light of school-district reorganization and regulations of the ODT. (24) Separate models for board rules and regulations, the annual report written policies, teacher manual, student manual, parent manual, and similar procedures which often are never followed, even though included in the laws, largely because both administrators and boards are not sufficiently familiar with the practices. (25) Digest of the best information on adult education. (26) Nontechnical but accurate di-

gest of problems and practices in state and federal financial aid to public education.

Some readers may say that nearly all these subjects have been treated in some of the major textbooks. Such documents are not distributed broadcast. Today there is need everywhere to simplify, condense, and popularize, yet with accuracy and authority, for mass understanding. It is most important that these numerous problems be treated in the light of the existing and changing laws of each separate state. To some it may seem that to educate more than 400,000 citizens to their democratic duties as government of the public schools is too large a task to undertake. The average board has about seven members. It is suggested that in the light of the importance of developing public education through a fully matured school board, assistance to seven persons is no more than their due. This is an important job for the trained educator calling for his sympathetic service in behalf of the laymen who also would know and serve intelligently and wisely the cause of public education.

[*Herbert B. Mulford is a layman and has been associated with the Illinois Association of School Boards, the Wilmette School Board, and the New Trier Township High School Board. Reported from the* Phi Delta Kappan, *XXV (May, 1943), 188-90.*]

Irish Teachers Campaign for Higher Salaries

TEACHERS in Ireland are showing signs of restiveness where salaries are concerned, and all over the country they are agitating for fair treatment from the government. At a recent public protest meeting in Dublin, the Rt. Hon. Martin O'Sullivan, T.C., Lord Mayor of Dublin, said:

"In my opinion the teachers' salary question today is due to the fact that any improvements in salary which have been obtained in the past were too closely related to the bad conditions of the old days and had no relation at all to the value of the services rendered by the teachers. The time is overripe for a complete revision of salaries. Any impartial tribunal would give vastly better salaries to the teachers, and we, the citizens, are prepared to back your demands in any constitutional means you may decide on."

Resolution before the meeting was: "That we demand an immediate increase in the remuneration of teachers and pensioned teachers commensurate with the great increase in the cost of living."—*Scottish Educational Journal.*

TEACHER RECRUITING AND SALARIES

JOY ELMER MORGAN

In the Journal of the National Education Association

A NATION with any concern for its own future cannot sit idly by and see its children, who must carry the burdens of civilization during the years ahead, deprived of their rightful heritage of good teaching. To provide such teaching is the paramount duty of each generation to the next. Yet the facts show that we are neglecting that duty. Since Pearl Harbor, for war reasons alone, 120,000 teachers have left the school, and teachers colleges — the main source of new teachers—have but 40 percent of their prewar enrolment.

Without facing the fact that teachers' salaries are far too low in proportion to teacher preparation and responsibility, we cannot hold our own and go forward as a nation during the highly competitive years ahead. Canada and England propose to double their expenditures for education. The USSR is rebuilding schools in the devasted areas with amazing speed and has a program for education for all.

The school is the greatest wealth-producing agency known to mankind. It develops and furnishes with power and purpose that mighty instrument for creating wealth — the human mind. The wealth of the world, both material and spiritual, is the possession of nations which spend most on their schools. The teacher is the heart and soul of the school. The only way we can protect the wellbeing of our country is to make sure every child has a competent, devoted, well-trained teacher.

Teachers have been forced out of the schools because they could not meet the increase in taxes and the cost of living on the inadequate salaries paid. With an average wage in industry $600 above the average teacher's salary, is it any wonder that teachers who are far better trained than wage earners and who can command not the *average* but *top* wages in industry should go where their services are appreciated and rewarded?

There is a close parallel between the salary situation now and that in the last war. In 1917 the average teacher's salary in the United States was $655. Then as now thousands of teachers were leaving the schools, and millions of children were without adequate instruction and guidance. Our country is still paying dearly for that neglect of youth. The NEA began at that time a teachers' salary campaign that reached the entire country. Facts were gathered and released to the press. School boards and superintendents were circularized. The campaign was kept up for several years and renewed during the depression

with the result that the average teacher's salary is now more than double that of 1917.

But the average salary of $1550 today is as inadequate under the new conditions that have arisen as the lower figure was during World War I. Every teacher must keep alive, must have the necessities of *subsistence*—food, clothing, shelter, and health services and if his standards in these matters are too low his teaching suffers. Every teacher has the usual obligations to himself and loved ones that come with the uncertainties of life. We all have these needs but the teacher has more. He is charged with transmitting the ideals and standards of good living and citizenship, the accumulated culture of democracy. To do this effectively, he must buy books and magazines, enjoy good music, travel, and continue his professional study. For the sake of society itself, his standard of living must include a *cultural factor.*

If teaching—in competition with law, medicine, engineering—is to attract and hold our ablest young men and women, salaries must be high enough to justify the long preparation and quality of work required. Provision must be made for a *professional factor* in determining teachers' salaries.

Conditions vary so widely that it is not possible to name a figure for the country as a whole, but we suggest that a rich country like ours, which must go forward if it is to hold its place of leadership among the nations, cannot afford to employ any teacher who is not worth at least $2000 a year. In the words of Washington's memorable challenge, "Let us raise up a standard to which the wise and honest can repair."

[*Joy Elmer Morgan is Editor of the Journal of the National Education Association. Reported from the* Journal of the National Education Association, *XXXIII (January, 1944), 1.*]

OF THE 117,500 teachers who changed positions between June and October of last year, 79,900 left the teaching profession and 37,600 went to other school systems. Over 10,000 men and 4,800 women joined the armed forces. Some 4,200 men entered business or industry, and 1,800 men took federal government positions. Of the women, 6,900 entered federal, state, or local government jobs; 9,800 went into business or industry; and 13,800 were married and left teaching. Approximately a quarter of the men and one third of the women leaving, however, went to better teaching jobs.

ORIGINALITY IN INDUSTRIAL ARTS EDUCATION

VIC MANKIN

In School Arts

OUR present industrial arts teaching programs not only underemphasize student originality, but in many cases nullify a certain amount of latent originality. One of the two major ways in which originality is suppressed is by the use of files containing plans as so-called teaching aids. Look at it this way. A boy comes into the shop with a desire to make a footstool. He has only a vague idea of what the conventional footstool design is like. He does realize the problem, however, which is to create a piece of furniture that will hold the feet comfortably above the floor level and be of some artistic value. Now if the instructor refers the pupil to plan number 4B327-9, the pupil will make the stool to the specifications of the plan, take it home to Mama, and that's that. But if the pupil is encouraged to create the stool without copying someone else's work, he would do a piece of original work. Now it is to be expected that the created object would not be as good from the standpoint of design as the copied work. However, it should be remembered that the education of the pupil is for the future that he is to live, not just to help him make an object for the present which would soon be a part of his forgotten past. And by doing his own designing, not only will the pupil take more interest in his work, but very shortly he may be creating projects which will be far better than those which he would normally have produced had he remained a slave to someone else's plans.

The second way in which originality is suppressed is by the required use of drawn plans instead of the encouragement of mental planning. Mental planning is a personal form of planning in which the student draws the plans in his mind instead of on paper. It works very simply and suffers no such limitations as does paper and pencil drawing. Objects can be in three dimensions and change in size and proportion instantaneously as the designer so wishes. Such a mental plan can be transparent or realistically colored. Best of all, mental planning develops the potential powers of the mind to the point where originality development results. Now say that a student decides that he wants to create a candlestick. He tells the teacher that he has an idea for a candlestick. Usually the first thing that the teacher makes the student do is to make a mechanical drawing of said project. Why make him transfer the design from his mind to a piece of paper? The powers of the mind are developed by constant contact with new experiences. This student uses said

powers for one hour and draws up a good plan. The teacher accepts it, and then the process becomes purely mechanical with the student. He stops using his mind and produces the project his plans call for. Why should he continue to use his mind when all the needed information is before him on a piece of paper? Instead of this it is better to encourage the student to design the project in his mind, with the occasional use of paper and pencil when absolutely necessary, and have him reason and plan as he goes through the process of construction. This way the student deals with the problems of designing, tools, procedures, and materials at the same time. There is unity, for the student's mind works as a reasoning agent and he sees all of the problems as one large united picture. After sufficient practice the average student will develop an ability for mental designing which will be more efficient and have greater creative possibilities than any form of pencil and paper drawing.

This writer does not wish to go on record as opposing any form of drawing classes. Mechanical drawing classes are essential in every industrial arts education program, for they afford the opportunity of transmission of thought from one mind to another which could be accomplished in no other practical manner. However, when used as crutches where not needed (reference here being made to shop situations where each pupil is designer and builder), they defeat their purpose and act to suppress student originality.

Student originality will develop if properly encouraged by teachers. The major aim should be to teach the correct uses of the tools. Then encourage the students to create projects of their own design, and as they go through the grades continually introduce them to unfamiliar tools. As students design and execute their designs in wood, metal, and other materials you should always be available to make helpful suggestions. But confine such aid to suggestions. Make the child use his reasoning powers, not yours. Constantly try to awaken the student's latent originality by showing him in contrast with what has been done, what can still be done. In this process, show trends in design, construction methods, etc., but never specific examples which will have a marked influence on his own work.

[*Vic Mankin is a teacher in the Philadelphia, Pennsylvania, schools. Reported from* School Arts, *XLIII (December, 1943), 117-18.*]

COLLEGIATE DISCRIMINATION AGAINST SHORTHAND AND TYPEWRITING

PAUL O. SELBY

In the Business Education World

WHILE a survey recently reported shows that 65 per cent of the colleges and universities in the United States now offer shorthand and typewriting in one fashion or another, they are not being accepted as the academic equal of other college courses. This is evident in the fact that one third of the colleges that offer these courses put some kind of limitation on the credit that the courses cover. These credit limitations take a number of forms and range from no credit at all, or no credit toward graduation, to discrimination as credit for admission to a professional college or toward the bachelor of arts degree. In some institutions credit is allowed for shorthand but not for typewriting; in others no credit is given for typewriting without shorthand. Credit may be allowed toward the requirements for a teacher's certificate, but none toward graduation. Or credit may not be allowed for beginning courses.

That shorthand and typewriting are singled out for discrimination becomes evident when one looks through college catalogs to see whether such limitations are placed on other courses. Usually there are none to be found. But one may note in the same catalogs full indiscriminate credit for first-year Latin, German, Spanish, and French, and for piano, violin, saxophone, percussion instruments, baton twirling, drum-major technique, boxing, basketball, volleyball, pingpong, archery, golf, horseshoes, horseback riding, soccer, wrestling, tap dancing, tennis, badminton, and swimming. It is evident that some authority has determined that elementary shorthand is not worthy of college, but elementary Spanish is. Someone somehow has determined that learning to twirl a baton is collegiate while learning to manipulate a typewriter is not.

Most of these discriminations are nothing but discriminations. They represent a grudging acceptance of shorthand and typewriting. The courses are offered to appease a student demand. But in order to discourage students from taking them, even when facilities are provided, some kind of handicap is fixed—some penalty is placed on their study. True, the practice of placing credit limitations is given some basis, usually insincere and always artificial.

Many uneducated academic authorities think of shorthand as some mere copying process. They do not appreciate that the shorthand writer takes sounds and translates them into a system of writing as different from English as is Greek and Chinese; that he later remakes this lan-

guage into English words, supplying punctuation marks, capitalization, paragraphing, and corrects the faulty grammar of the speaker as a mere side line of the translation. Persons of low IQ do not become good shorthand writers. For the thought-provoking values of typewriting, not such a clear case can be made. Persons with low IQ do master the technique, although more than technique is required for intelligent typewriting. But if this is not a complicated subject, it is a more complicated art than baton twirling, drum beating, or ping-pong pinging. If typewriting is not to be recognized because it is fairly easy, virtually every college has other courses that should be ousted for the same reason.

Another type of discrimination comes through allowing credit for shorthand and typewriting at an inferior rate as compared with other college courses. Why shorthand should be treated differently from other subjects requiring preparation is difficult to see. Does anyone think that the subject can be learned without study? Shorthand is usually taught as many other college subjects are taught — with two hours of preparation for each hour spent with the teacher. Because typewriting may be taught in college under several different plans, the standard credit to be given to the study of typewriting should vary with the plan. But if for every hour of classwork the student is normally required to do two hours of practice, then there should be no cut of credits from the semester-hour basis.

There is no reason why there should exist any credit discrimination against shorthand and typewriting. Basically, credit is a measure of time spent in a course and shorthand and typewriting should be accredited according to the time consumed in studying them by a normal, average student. With the fact fully in mind as to what constitutes a college subject and what constitutes a semester hour, the teachers of shorthand and typewriting in every college should boldly request that these subjects be deemed worthy of full college recognition and credit.

[*Paul O. Selby is Professor of Business Education at Northeast Missouri State Teachers College, Kirksville. Reported from the* Business Education World, *XXIV (January, 1944), 270-73.*]

EVALUATING BUSINESS-SPONSORED EDUCATIONAL MATERIALS

KENNETH DAMERON

In School Management

THE war has called up a whole new army of business-sponsored teaching aids—meat substitute charts, sugar-saving recipe booklets, maintenance-of-equipment pamphlets, safety and salvage films, lesson plans on rationing, taxation, inflation, lend lease, insurance. And teachers have welcomed business-sponsored educational materials to stimulate classroom interest and activity, to supply much-needed reference data, and to supplement textbooks. But in picking and choosing from among the wealth of materials now available, teachers are still seeking a yardstick by which they can fairly and competently measure these teaching tools and adjust them to existing curriculums and changing needs.

The production of, and the need for, timely teaching tools will not end with the war, but rather increase. Hundreds of new products which are bound to make their appearance when consumer goods production begins again, together with the kaleidoscopic adjustments of a postwar world, will unquestionably call for many and diverse new teaching aids. This means that in the months and the years ahead the school administrator and his teachers will repeatedly ask the question: "How can we judge business-sponsored teaching materials?"

Of course no blanket answer can be made to that question. Needs vary at different levels of education and individual teaching methods vary widely. But recent surveys which the Committee on Consumer Relations in Advertising has made among representative groups of elementary and high-school teachers provide fundamental parts of the answer.

For example, on the source of materials a majority of teachers rank teaching aids from the government, first; materials from business, second; material from trade associations, third; and materials from consumer organizations, fourth. Although many teachers have no well-defined preference as to the source of materials within an organization, they do indicate a prejudice against materials from the advertising department, preferring teaching aids from an educational department. In many business firms today, such a special department is under the guidance of an experienced educator whose task it is to maintain proper school relations.

Teachers surveyed felt that many of the materials developed by business had value in (1) motivating

student interest, (2) improving classroom presentation, (3) providing information not generally available, (4) supplementing existing information, (5) objectifying concepts, (6) making abstractions concrete, and (7) lending interest to bulletin boards.

Many types and forms of teaching aids, from pamphlets to samples, have proved their worth to teachers at all levels, and most teachers find that a variety of types is helpful in their work. However, in order of preference the teachers we have surveyed rank their choice as follows: (1) pamphlets or booklets, (2) wall charts, (3) samples, (4) motion pictures, (5) illustrations, (6) lantern slides, (7) demonstration devices.

While our surveys show motion pictures in fourth place, it must be remembered that many schools do not have projectors, that some state boards of education do not permit the use of films with advertising content, and that no matter how much teachers may like films in theory, educational techniques for using motion pictures are not well developed as yet, especially at the elementary level. Because we have recognized the growing importance of motion pictures and other presentations involving projection, we made a special questionnaire study among teachers who have had experience with films. As a group, elementary instructors preferred pictures emphasizing growing, cultivation, and extraction of raw materials to be made into finished products; and as a logical continuation of this theme, high-school teachers preferred pictures showing a product from raw state until it reached the consumer. Buymanship pictures were favorites with the high-school group as opposed to the elementary teachers' choice of special product pictures or films telling a complete industry story. Both groups agreed that a picture developed around a story was best for teaching presentation, that color pictures were very desirable, and that at the high-school level sound accompaniment was important.

In deciding whether to use business-sponsored material, four factors will probably dictate the educator's final decision—the informative character of the materials, physical presentation as it affects classroom use, literary style of the piece, and the advertising content. Naturally, if advertising dominates the material it is not educationally sound.

[*Kenneth Dameron, a faculty member at Ohio State University, is Director, Committee on Consumer Relations in Advertising. Reported from* School Management, *XIII (January, 1944), 131, 134.*]

PERSONALITIES: **Ben W. Miller** of the University of Indiana has been elected executive secretary of the American Association of Health, Physical Education, and Recreation, a department of the NEA with headquarters in Washington. He succeeds **N. P. Neilson** who has been named head of the department of health and physical education, University of Utah. . . . **May E. Peabody** of the division of elementary education, New York State Department of Education, has retired. **Russell D. Cole** has been elected president of Cornell College, Mount Vernon, Iowa, succeeding the late **John B. Magee. . . . Vera Thompson** has retired after serving for many years as member of the division of examinations and testing of the New York State Education Department. . . . **J. F. Cramer** will leave his position as superintendent of the Eugene, Ore., schools on July 1 to become dean and director of general extension for the Oregon State System of Higher Education. . . . **Edward V. Cushman** is the new superintendent of the Amsterdam, N. Y., schools, coming from the Sherburne, N.Y., Central School. . . . **Francis G. Cornell** is the new chief of research and statistical service, Vocational Division, U. S. Office of Education. . . . **James McKeen Catell,** founder of *School and Society,* editor of *Science,* and outstanding psychologist, died January 20 in his 83rd year. . . . **George F. Jammer** has been named superintendent of schools at Lockport, N. Y. He was formerly superintendent at Wellsville, N. Y., where his successor is **Duane H. Anderson. . . . Willard B. Spaulding,** superintendent of the Passaic, N. J., schools, has been named to the superintendency at Portland, Ore. . . . **R. B. Marston,** executive secretary of the West Virginia State Education Association, has been appointed head of the newly created legislative and federal relations division of the NEA in Washington which is charged with the securing of federal-aid legislation as well as other legislative matters. **Glenn Archer,** director of professional relations for the Kansas State Teachers Association, has been named associate director of the division. . . . **Daniel S. Kealey,** superintendent of the Hoboken, N. J., schools since 1922, died December 28 at 50 years of age. His successor is **Thomas F. McFeeley. . . . William O. Hotchkiss** has retired as president of Rensselaer Polytechnic Institute. . . . **Milton G. Davis** of Lake Forest, Ill., has been appointed superintendent of the Peoria, Ill., schools. . . . **Maxine French** has been appointed to the faculty of Central Washington College of Education as assistant professor of education. . . . **Charles C. Root,** head of the department of education, Buffalo, N. Y., State Teachers College, has retired. . . . **A. L. Kerbow** is the new dean of the college of educa-

tion, University of Houston, Texas. . . . **A. B. Meredith** has retired as administrative assistant to the commissioner of education for the state of New York. . . . **Bland L. Stradley,** dean of the college of arts and sciences, Ohio State University, has been named vice-president of the university. . . . **William M. French** is the new president of Hastings, Neb., College. . . . **Jessie Gay Van Cleve,** for many years chief of the school and children's library division of the American Library Association, died on January 31 at 64 years of age. . . . **Donald W. Campbell** of the Pennsylvania State Department of Public Instruction has been named director of reference and research for the Newark, N. J., schools. . . . **George P. Hambrecht,** director of the Wisconsin State Board of Vocational and Adult Education, died recently at 72 years of age. . . . **Clyde U. Phillips,** superintendent of the Hays, Kansas, schools, has been elected president of the Kansas State Teachers Association for 1944. . . . **James N. Muir** will retire May 1 from the superintendency of the Quincy, Mass., public schools. . . . **Henry B. McDaniel** of the San Diego, Calif., schools has been named state director of vocational education for California. His successor as San Diego vocational guidance director and psychologist is **Anna Catherine Moser.** . . . **Charles E. Burns** is retiring as president of Milligan College, Tenn. . . . **Stephen M. Corey,** superintendent of the Laboratory Schools of the University of Chicago, has been appointed educational editor of Encyclopedia Britannica Publications and of Encyclopedia Britannica Films, Inc., formerly Erpi Classroom Films, both of which are owned by the University of Chicago. . . . **Donald M. Erb,** president of the University of Oregon, died of pneumonia recently at 43 years of age. . . . New members of the Educational Policies Commission of the AASA and NEA are **Prudence Cutright,** acting superintendent of the Minneapolis, Minn., schools; **Paul T. Rankin,** assistant superintendent of the Detroit, Mich., schools; and **Maycie K. Southall,** professor of elementary education, George Peabody College for Teachers. They replace **John K. Norton,** Teachers College, Columbia University; **Frederick M. Hunter,** chancellor, Oregon State System of Higher Education; and **Emily Tarbell.** . . . **Maurice J. Thomas** is the new superintendent of the Rochester, Minn., schools. . . . **Arthur H. Wilde,** dean emeritus of the school of education, Boston University, died January 4 at 78 years of age.

An organization known as the American Association for an International Office of Education has been established in New York City at 135 West 44th St. According to press reports, the association feels that an international office of education could operate in a postwar

world to the benefit of education generally through improving standards, clarifying aims, and fostering intercultural understanding. The office might assist materially in carrying out educational policies decided on by the United Nations and help various countries meet the problems of rehabilitating education and the democratic processes. Officers of the association are Harlow Shapley, director, Harvard College Observatory, chairman; James Marshall, member of the board of education, New York City, and Monsignor George Johnson, associate professor of education, the Catholic University of America, vice-chairmen; and Sylvan L. Joseph, formerly OPA regional director, treasurer. Others include Louis Adamic; Dorothy Canfield Fisher; Henry I. Harriman, director, Federal Reserve Bank, Boston; Mrs. Henry A. Ingraham, member, New York City Board of Higher Education; Grayson N. Kefauver, dean, School of Education, Stanford University; Ruth Bryan Rohde, former ambassador to Denmark; Alexander J. Stoddard, superintendent of schools, Philadelphia; Senator Elbert D. Thomas; and Owen D. Young, member, Board of Regents of the State of New York.

THE President's budget message to Congress mentioned the importance of educational agencies in the coming months. He stated: "It is imperative that we be on guard against any weakening of the administrative agencies which have been established for the purpose of job placement, counseling, and training. To master this great task of reemployment we must maintain and strengthen during the demobilization period a unified national employment and counseling service. Adequate provisions for job retraining, education, and rehabilitation must supplement the placement service. Special measures are needed to increase the opportunities for the employment of exservicemen, particularly those disabled in service." The budget itself carries out this policy with a recommendation that Congress increase by 60 per cent the salary appropriations for professional services in the U. S. Office of Education. Last year the office received $295,000 for salaries—a figure nearly constant for the past decade. For 1944-45, Commissioner Studebaker is asking, with administration blessing, $475,900. If approved by Congress, the increase will enable the office to employ 50 to 60 new education specialists such as a director of a new division of school recreation and camping and new division of physical education and health activities; a specialist in liberal arts and sciences; a specialist on the British Empire; experts on the Far and Near East; experts in supply and school plant management and school transportation; specialists in school recreation, camping, and health instruction.

QUERIED as to the ten outstanding educational events of 1943, editors of educational journals who are members of the Educational Press Association chose the following list:

1. The U. S. Senate debates on federal aid to education—the first national airing of education's needs in nearly three-quarters of a century.

2. Education's acceptance of the challenge for international planning—as exemplified in the Harpers Ferry meeting of the International Education Assembly and conferences of the Committee on Educational Reconstruction, together with the publication and widespread distribution by the Educational Policies Commission of the NEA of the pamphlet, *Education and the People's Peace*.

3. The teacher shortage; the trend to lower teaching standards to supply teachers; and the drop in teacher-training enrolments.

4. Trend toward equalization of salaries of Negro and white teachers. Litigation concerning this matter has taken place in practically every state maintaining separate education facilities for the races; in the majority of instances Negro teachers won their point by consent decrees.

5. The Osborne Committee Report, recommending a billion-dollar educational program for returning veterans, and introduction of S. 1509 by Senator Thomas carrying the recommendations.

6. Developments in Latin American educational relations as shown in the significant study by the American Council on Education of the manner in which our textbooks deal with Latin America; and by the first meeting of ministers of education in the New World held in Panama.

7. The Army Specialized Training Programs by means of which colleges and universities were "saved from becoming drafty, empty halls of learning."

8. America's awakening to the need for technical education—as exemplified by the establishment of a U. S. Office of Education Committee to study this missing rung in our vocational-professional ladder.

9. "The Cheshire cat-like disappearance" of the National Youth Administration from the educational scene.

10. The spirited response of teachers and administrators of the NEA's War and Peace Fund Campaign.

ANNOUNCEMENT has been made by the U. S. Office of Education of the appointment of a committee to serve in planning a National Institute on Education for Peacetime. The committee is headed by Assistant Commissioner Bess Goodykoontz and William D. Boutwell is to act as director of the institute.

THE Progressive Education Association is balloting on the adoption

of a new charter and a new name for the organization. The Board of Directors has recommended that the association be called the American Education Fellowship. In a statement of policy to the membership, the Board advocates education for social reconstruction in progressive-minded schools, the focusing of attention on all aspects of community life which affect education including the establishment by the association of a community service bureau to work with communities, resistance to reactionary minorities, and the encouragement of democratic practices including a democratic world order.

BILL S. 1509, introduced by Senator Elbert Thomas to meet the educational deficit by providing a billion-dollar educational program for returning veterans, is being revised in committee with the aid of representatives of the NEA, American Vocational Association, American Council on Education, and 18 other national organizations. Principal objections to the bill as originally introduced revolved around the provision of adequate safeguards concerning federal control of state and local educational agencies. A provision has been added as follows: "No department, agency, or officer of the United States in carrying out the provisions of this Act shall exercise any supervision or control over any state educational agency or any educational or training institution with respect to their personnel, curriculum, or methods or materials of instruction." President James H. Conant of Harvard has expressed his support of the principles of the bill.

ANNOUNCEMENT has been made of the merger of the Association of American Colleges and the National Conference of Church-Related Colleges with the latter organization being constituted a permanent commission of the association with its own office, secretary, and membership as well as autonomy. The office of the new commission will be at 744 Jackson Place, NW, Washintgon 6, D. C., and Dr. Gould Wickey, executive secretary of the National Conference, will serve as executive secretary of the commission.

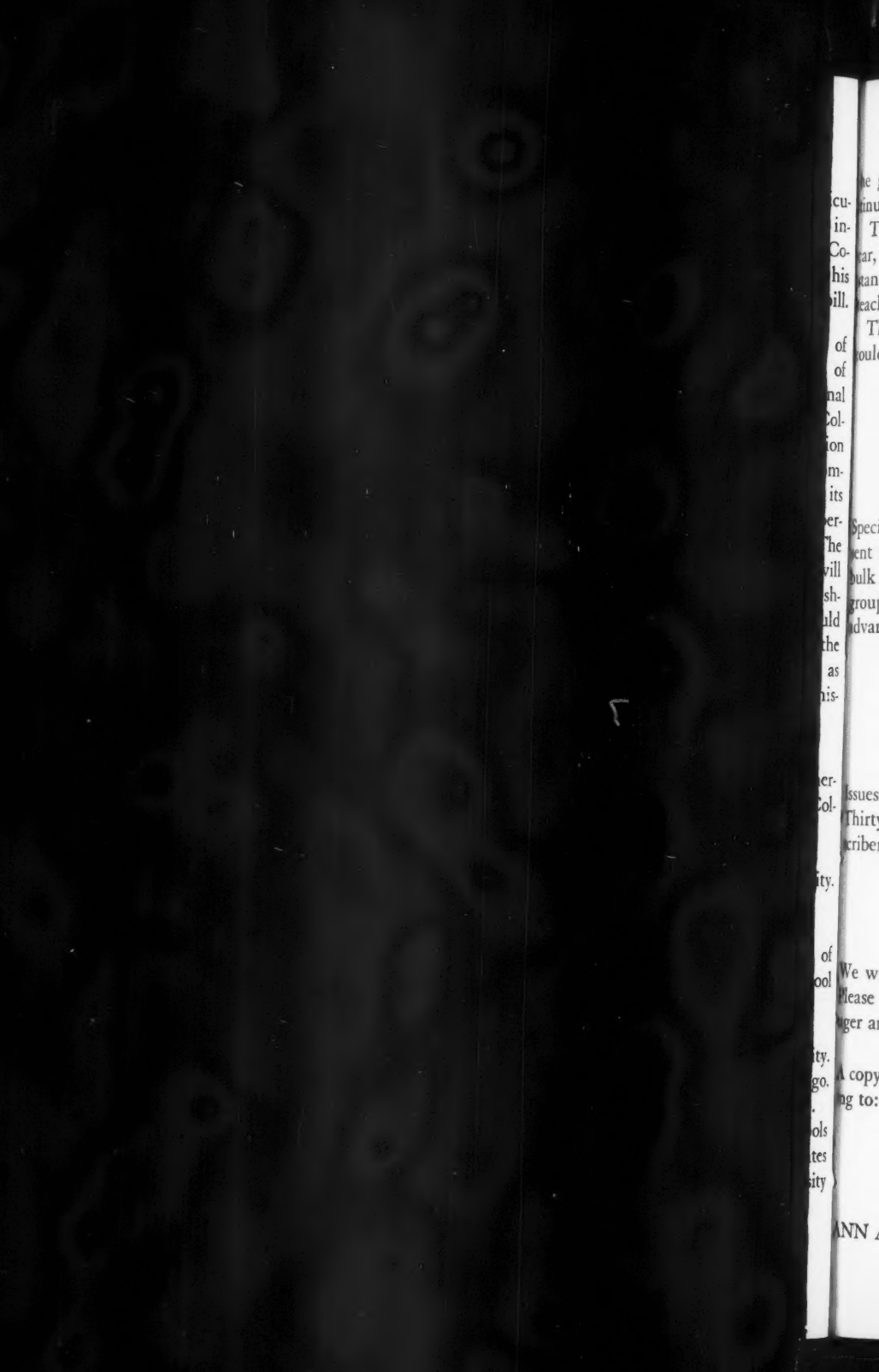
DATES:

Regional meetings of the American Association of Teachers Colleges:

February 17-18, Atlanta, Ga.
February 24-25, New York City.
March 1-2, Chicago.
March 10-11, Kansas City.

Regional wartime conferences of the American Association of School Administrators:

February 15-17, Atlanta, Ga.
February 22-24, New York City.
February 28-March 1, Chicago.
March 8-10, Kansas City, Mo.
March 24-25, Private Schools Association of the Central States annual meeting at the University Club, Chicago.



(Continued from Cover 4)

he got that far the course was discontinued for a year and he missed it.

The young man never did drive the car, but in view of his high academic standing he was later appointed to teach the course.

This story is, of course, fiction. You couldn't possibly find a parallel in the action, or rather lack of action, during the last 30 or 40 years, of any Department of Education that you might happen to know.

But this I might say: Any resemblance between this fictional Department of Procrastination and any known body, living or half-living, is purely intentional.

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THE EDUCATION DIGEST

ANN ARBOR MICHIGAN

A PARABLE

GEORGE H. PENROSE
In the School

A CERTAIN man had two sons, and the younger of them said to his father, "Father, teach me how to drive the car."

"Certainly," said the father—you can tell this is just a story by the way the father agreed so readily—and putting on his dust coat and goggles, drove the boy out to the country where he showed him how to operate the machine and then let him try it himself.

In half an hour the boy was driving the car and a few weeks later was one of the best drivers in the county.

The older boy went to the Superintendent of Education for his district and said, "Superintendent, teach me how to drive a car."

"Certainly," said the superintendent, "I shall ask the Department of Education to prepare a course on the subject."

There is a short pause here to indicate the passage of three years.

Three years later, after receiving 469 letters from education authorities, public bodies, and individual citizens, the Department decided to take action.

It issued a statement, which said that it agreed in principle with the idea of preparing such a course, and that steps would be taken in the near future to "implement the recommendations it had received."

This statement was, of course, given to the press, which went all out on editorials praising the Department of Education for its marvelous foresight and progressive outlook.

This lavish praise so pleased and tonished the Department that it peated the process again and ag each time doing nothing, but alw receiving the warmest praise for nobility of its good intentions.

There is a longer pause here to dicate the passage of 30 years.

Thirty years later, after particula heavy pressure from public opini the Department announced that course would be begun, and authori a textbook for the purpose.

The textbook was in three volum
Volume I, "History of Transpor tion, from the Time of the Anci Greeks."
Volume II, "The Combustion E gine, Past, Present, and Futur
Volume III, "Driving the Car."

Now 33 years is a long time to w for a course of study, and the yo man of our story, who had long si married and now had a grown-up s felt that since he was now too old take the course himself, he would the next best thing and have his take it. To be sure, the boy had no terest or ability in things mechani but of course that didn't make any ference.

The boy took the course. It la three years.

On the first part (historical) the made 98 percent; on the second (chanical) by dint of hard work, 58 cent; on the third, about driving car—well, unfortunately, by the ti

(Continued on Cover 3)